



The Role of Project-Based Writing in Shaping Students' 6Cs Competencies: An Analysis of Students' Perceived Values

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Abstract

This study analyses the value perceived by students towards the implementation of Project-Based Writing (PBW) in shaping the competencies of the 6Cs of the 21st century: Critical Thinking, Creativity, Collaboration, Communication, Citizenship, and Character. Using a quantitative approach, data was collected through a Likert questionnaire from 30 English Education students at IAIN Curup who had participated in PBW learning. The researcher employed SPSS software to analyze Likert scale data and classify students' perceived values. The analysis showed that students perceived values are “agree” to “strongly agree” that PBW significantly improved competencies in critical thinking (Mean = 4.27; SD = 0.52), creativity (Mean = 4.33; SD = 0.58), collaboration (Mean = 3.82; SD = 0.65), communication (Mean = 3.99; SD = 0.71), citizenship (Mean = 3.90; SD = 0.63), and character (Mean 3.95; SD = 0.64). PBW creates an immersive learning experience through the development of analytical thinking skills, innovation, teamwork, effective communication, social awareness, and resilience. PBW enhances analytical thinking, creativity, teamwork, communication, and social awareness by involving students in in-depth research, problem-solving, and community-oriented projects. This research confirms the important role of



PBW in enhancing students' readiness to face real-world challenges while suggesting improvements to the project design to ensure its relevance and effectiveness. The study on Personality-Based Learning (PBW) in IAIN Curup has limitations, including limited subjects, limited data collection using questionnaires, focus on student perceptions, inability to differentiate between online and offline learning, and insufficient project design analysis.

Keywords: Project-Based Writing, 6Cs competencies, 21st-century education, student perceptions, writing skills.

A. Introduction

The 6Cs competency has been becoming critical in all fields, including education (Azorín & Fullan, 2022; Belkbir, 2024; Kamaruddin et al., 2023). The competencies required for 21st-century education encompass six key aspects: Critical thinking, Creativity, Collaboration, Communication, Culture/Citizenship, and Character Education/connectivity, abbreviated as the 6Cs of 21st Century Education. (Griffin et al., 2012). Today's education system should be oriented towards integrating 21st Century competencies. The Indonesian Ministry of Education has reformed the curriculum at all levels by adopting 21st-century competencies. (Sukmayadi & Yahya, 2020). Susetyo (2020) emphasizes that this curriculum renewal is aimed at preparing students to face the demands of the workforce. The integration of 6Cs competencies is a must in the context of learning at the university level. The perceived values from the student's point of view as the subject of learning also need to be seen. These values will certainly provide an overview of the effectiveness of project-based writing implementation in improving 6Cs competency.

Education in the 21st century is aimed at preparing students to face real-life challenges. Zhao (2019) identified that central to this preparation is the development of knowledge, attitudes, values, and skills. To meet these demands, the 21st-century education paradigm prioritizes enhancing the quality of human resources through integrated skills and expertise. 21st Century Learning Competencies are crucial attributes for students to develop to succeed academically and professionally. The 21st Century Learning Competencies will equip students to deal with the increasing complexity of contemporary and future challenges (Frache et al., 2019) Project-based learning (PBL) offers a dynamic and interactive approach to fostering the 6Cs competencies,



especially in writing instruction. In higher education, PBL involves students in meaningful practices that mirror real-world challenges, thereby encouraging the development of these essential 21st-century skills.

Educators have adopted various instructional strategies, one of which is Project-Based Learning (PBL) which is considered effective for promoting the 6Cs competencies in writing classes. Project-based learning is a highly suitable and appropriate learning model for writing classes. Moreover, in the context of learning in higher education, this learning model provides meaningful experiences for students from assignments and projects given during the learning process. Mukti et al. (2020) and Younis et al. (2021) state that through investigative activities, problem-solving, and complex challenges, project-based learning in the writing classroom will encourage students to acquire 21st-century competencies. While PBL is highly effective in fostering these 6Cs competencies, its implementation faces challenges such as student engagement, resource limitations, and continuous educator support. Therefore, an educational practitioner needs to know students' perceived values regarding implementing Project-Based Writing to improve 6C competencies (Sultan & Javaid, 2018) to make it more effective in the future.

According to the literature and the results of previous studies, the use of project-based learning models has received positive responses from students. Multiple studies, including those by Haniah et al. (2021) and Fadhillah et al. (2023) demonstrate that students have a generally positive perception of PBL in enhancing skills such as creativity, communication, and collaboration. Subsequently, a study by Deveci (2018) shows that students were particularly happy that it contributed to general skills that included the use of technology and critical thinking skills. They were also positive about its effects on their English language and teamwork skills. The promotion of active learning and innovation was also agreed upon as a positive attribute of collaborative project writing. Those studies highlight the students' positive perception of project-based learning in writing classes. However, despite the positive perceptions noted in the literature, practical challenges remain. EFL students at IAIN Curup face two main problems when the lecturer integrates project-based writing to shape 6Cs competencies. The first issue is that students struggle



with consistently understanding and applying the 6Cs competencies in their project-based writing assignments. Following the previous issue, students' inconsistency in engaging with project-based leads to varying levels of interest, understanding, or motivation, resulting in the uneven development of 6Cs competencies. Given the critical importance and the problems of the 6Cs in writing instruction at the tertiary level, evaluating how students perceive the effectiveness of project-based writing is essential. Understanding these perceived values will provide educators with insights to refine and optimize the application of project-based writing in enhancing students' 21st-century competencies.

B. Method

1. Research Design

The study uses quantitative analysis to investigate students' perceived values regarding their involvement in Project-Based Writing and its implications in shaping 6Cs competencies (Critical Thinking, Creativity, Collaboration, Communication, Citizenship, and Character). Per Cohen et al. (2002), surveys, tests, and statistical analysis allow the researchers to categorize students' perceived values and represent a clear visual growth in competencies.

2. The Subject of the Research

This study's participants were 30 English Education students from Institut Agama Islam Negeri (IAIN) Curup who were selected purposively. The researcher used principal requirements to choose the participants. First, the participants should be English Education students from the tertiary level. Next, the eligibility criteria require students to have followed writing classes from semesters 5 to 7 that apply Project-Based Learning.

3. Data Collection Technique

Data were collected using a Likert-scale questionnaire to measure students' perceived values of their 6Cs competencies. The questionnaire was arranged according to several experts' theories regarding Project-based learning in writing and 21st-century competencies. It consists of eighteen statements, rated on a 5-point Likert scale, ranging from "Strongly Disagree" (1) to



"Strongly Agree" (5). Then, the data were collected online using Google Forms over two weeks. The data collection process was conducted anonymously to keep the respondents' confidentiality. The blueprint of the questionnaire can be seen in Table 1 below:

Table 1. Blueprint of Questionnaire

Competencies	Statements	Scale				
		SD (1)	D (2)	N (3)	A (4)	SA (5)
Critical Thinking (Thomas, 2000; Fullan & Langworthy, 2014)	1. The writing project required me to critically evaluate various sources of information before using them in my writing assignment.					
	2. Through the writing project given by my lecturer, I learned to compare different perspectives on a topic before concluding.					
	3. Through the writing project, I can develop the ability to assess the strengths and weaknesses of arguments.					
Creativity (Bell, 2010; Fullan & Langworthy, 2014)	4. The writing project assigned by my lecturer made me think creatively about finding new strategies to solve problems.					
	5. Through the writing project, I felt encouraged to use my imagination to develop original ideas.					
	6. The writing project helped me explore various creative solutions to complex problems.					
Collaboration (Thomas, 2000; Fullan & Langworthy, 2014)	7. The writing project improves my ability to cooperate with others to achieve a common goal.					
	8. I communicate regularly and effectively with my teammates during the writing project to achieve a successful outcome.					
	9. I learned how to give good feedback to team members when working on writing projects.					



Communication (Fullan & Langworthy, 2014)	10. The writing project helped me to communicate my ideas clearly in written form.					
	11. My confidence increased in expressing my ideas through written assignments while working on the writing project.					
	12. During the writing project, I can improve my ability to listen to others' opinions and incorporate their ideas into the project.					
Citizenship (Fullan & Langworthy, 2014)	13. The writing project increased my awareness that writing can contribute to the community or society in various fields.					
	14. Through the writing project, I learned the importance of being responsible and actively contributing to the assignment.					
	15. I became aware of my responsibilities as a team member and tried to continue contributing throughout the writing project.					
Character (Fullan & Langworthy, 2014)	16. The writing project developed my persistence in overcoming challenges and obstacles.					
	17. I became more disciplined in managing my time while working on a writing project.					
	18. The writing project from my lecturer motivated me to adapt despite the challenges.					

4. Technique of Data Analysis

To analyze Likert scale data, the researcher used SPSS software to categorize students' perceived values. Descriptive statistics aims to explore the level of students' self-perceived 6Cs competencies and their performance in project-based writing. The researcher used a set of indicators of perceived values based on a 5-point Likert scale from Strongly Disagree (1) to

Strongly Agree (5). Each indicator reflects the specific aspect of how students perceive the 6Cs competencies.

In categorizing students' perceived values, the researcher converted the responses into Mean scores and allocated levels of perception, ranging from Strongly disagree (1.00) to Strongly Agree (5.00). In this process, the researcher utilized SPSS software and employed several steps:

1. Input the data: The collected data is input into the SPSS table where each row represents participants and each column represents the Likert scale questions.
2. Total Score Calculating: The researcher computed the total score for each competency by summing the relevant statements.
3. Calculating the Mean score: Mean represents the average tendency of respondents to each statement After calculating the total score for each competency, the researcher converts these scores into mean by using the following formula:

$$\text{Mean} = \frac{\sum(xi \times fi)}{\text{total number of respondents}}$$

Description:

xi: Likert score (1 = SD, 2 = D, 3 = N, 4 = A, 5 = SA).

fi: Frequency of respondents.

Total Respondents: The sum of all frequencies.

4. Perceived Values Categorization: After collecting the mean scores of each competency, the researcher categorized the perceived values into different levels by referring the following table:

Table 2. Categorization of Perceived Values

Mean Scales	Categories of Perceived Values
1.00 – 1.80	Strongly Disagree
1.81 – 2.60	Disagree
2.61 – 3.40	Neutral
3.41 – 4.20:	Agree
4.21 – 5.00:	Strongly Agree

5. Calculating the Average Standard Deviation (SD) for Each Variable: This analysis measures how much variation or consistency in respondents' answers to variables. Low SD indicates that respondents' answers are more consistent, while high SD indicates more variety.

$$SD = \sqrt{\frac{\sum fi(xi - Mean)^2}{total\ number\ of\ respondents}}$$

Description:

xi : Likert score (1 = SD, 2 = D, 3 = N, 4 = A, 5 = SA).

fi : Frequency of respondents.

Mean: Average tendency of respondents to each statement

Total Respondents: The sum of all frequencies.

6. Running the Descriptive Analysis: The recorded data of perceived values are then analyzed by selecting the categorical variables to identify how students deal with each category.

C. Finding and Discussion

1. Finding

After distributing the online questionnaire, the researcher gained 30 responses from 55 target respondents. Afterward, the researcher analyzes the data quantitatively to categorize students' perceived values on using Project-based writing in shaping 6Cs competencies. The data analysis was conducted systematically based on formulated steps.

Table 3. Statistical analysis of students' perceived values on project-based writing in shaping critical thinking competency

Items	Scales					Max. Score	Mean	Standard Deviation
	SD (1)	D (2)	N (3)	A (4)	SA (5)			
Item 1	0	0	0	18	12	150	4.40	0.49
Item 2	0	0	2	19	9	150	4.23	0.56
Item 3	0	0	2	21	7	150	4.17	0.52

It should be noted that Table 2 presents the level of how students perceive project-based writing's role in shaping their critical thinking competencies. In terms of Critical Thinking competencies, students believe that project-based writing is highly effective in shaping 21st-century competencies. With a Mean score of 4.40 (SD = 0.49), students agreed that project-based writing enhances their ability to critically evaluate sources before incorporating them into projects. By providing critical questions to information, students accept as true that they can reflect and evaluate to craft persuasive written statements. In crafting persuasive arguments, students must

compare different perspectives before concluding. This competency is recognized as an aspect fashioned during project-based writing with a Mean score of 4.23 (SD = 0.56). Students' critical thinking competencies can correspondingly be indicated by employing the ability to assess the strengths and weaknesses of arguments. On the other hand, with a mean score of 4.17 (SD = 0.52), students Agree that project-based writing assists them in developing arguments from various resources by analyzing and synthesizing critically. The calculated standard deviation interprets respondents' consistency for each item with slight variation.

Table 4. Statistical analysis of students' perceived values on project-based writing in shaping creativity competency

Items	Scales					Max. Score	Mean	Standard Deviation
	SD	D	N	A	SA			
Item 1	0	0	6	16	8	150	4.33	0.59
Item 2	0	0	7	13	10	150	4.37	0.61
Item 3	0	0	3	20	7	150	4.30	0.54

As the process of thinking, writing requires students' creativity. Students feel that the written project given by the lecturer made them think creatively to find new strategies for problem-solving, with a mean score of 4.33 (SD = 0.59). Additionally, the questionnaire response showed that students are encouraged to use their imagination with a mean score of 4.37 (SD = 0.61). This analysis result indicates that students can maximize their imagination to grow original ideas. The result of the questionnaire also indicates that through project-based writing, students can explore various creative solutions to complex problems, with a mean score of 4.30 (SD = 0.54) responses. These statistical analyses resulted in average responses that tended toward Agree to Strongly Agree.

Table 5. Statistical analysis of students' perceived values on project-based writing in shaping collaboration competency

Items	Scales					Max. Score	Mean	Standard Deviation
	SD	D	N	A	SA			
Item 1	0	0	7	21	2	150	3.83	0.52
Item 2	0	1	11	14	4	150	3.70	0.68
Item 3	0	0	8	16	6	150	3.93	0.75



Table 5 shows that students can improve their ability to cooperate with peers with a mean score of 3.83 (SD = 0.52), which implies respondents tended to agree consistently. Students also confirmed that they communicate regularly and effectively with peers during the writing project collaboration. After following several stages of the writing project, students believe that the collaboration competency has increased alongside the project. It is shown by their responses with a mean score of 3.70 (SD = 0.68), which implies students agree with a moderate variation. Based on the last statement of the questionnaire, with a mean score of 3.93 (SD 0.75), students confirmed their ability to deliver meaningful and valuable feedback to team members at what time working with peers on writing projects. This result implies that students agree with the minimum variant. Consequently, Item 1's Standard Deviation (SD) proves that the majority of respondents consistently agree with the items. Item 2's Standard Deviation (SD) demonstrates that there is a minor variant, with the majority of students agreeing. Item 3's Standard Deviation (SD) implies a stronger perception of agreement, with more variant perceived values than Item 1.

Table 6. Statistical analysis of students' perceived values on project-based writing in shaping communication competency

Items	Scales					Max. Score	Mean	Standard Deviation
	SD	D	N	A	SA			
Item 1	0	0	5	16	9	150	4.13	0.67
Item 2	0	2	8	15	5	150	3.77	0.88
Item 3	0	0	3	22	5	150	4.07	0.57

The growth of students' communication competencies is measured using three statements on the questionnaire. With a mean score of 4.13 (SD = 0.67) showing that students' perceived values are quite uniform under the domination of agree and strongly agree responses, students emphasized that during the writing project, they can communicate their ideas clearly in written form. Students' confidence in expressing ideas also increased while working on the writing project, as indicated by a mean score of 3.77 (SD = 0.88). It infers a variety of higher perceived values than other items. Meanwhile, during the writing project, with a mean score of 4.07 (SD = 0.57), students confirmed that they can improve their ability to listen to peers' opinions. Not only that,

but students also emphasized that they can confidently incorporate their ideas into the project. This statistical outcome evidences a strong consistency among respondents.

Table 7. Statistical analysis of students' perceived values on project-based writing in Shaping Citizenship Competency

Items	Scales					Max. Score	Mean	Standard Deviation
	SD	D	N	A	SA			
Item 1	0	0	11	15	4	150	3.77	0.66
Item 2	0	0	5	16	9	150	4.13	0.67
Item 3	0	0	10	16	4	150	3.80	0.57

Citizenship competency is also shaped during the writing project. Based on students' responses, the writing project fostered them to contribute to the community or society in various fields. With a mean score of 3.77 (SD = 0.66), it indicates that project-based writing assists students in having a strong social awareness. In this case, respondents tended to agree with moderate variation. Furthermore, the second statement acquired a mean score of 4.13 (SD = 0.67) and showed that by doing the writing project, students learned the importance of being responsible and actively contributing to the assignment. This analysis result implies a tendency to agree with minor variety. In the framework of the writing project, students need to be responsible as team members and contribute throughout the assignment. This statement is confirmed by the result of students' responses to the third statement of the questionnaire, with a mean score of 3.80 (SD = 0.57), which shows a tendency to agree with a high level of consistency.

Table 8. Statistical analysis of students' perceived values on project-based writing in Shaping Citizenship Competency

Items	Scales					Max. Score	Mean	Standard Deviation
	SD	D	N	A	SA			
Item 1	0	0	7	18	5	150	3.93	0.63
Item 2	0	1	13	10	6	150	3.70	0.71
Item 3	0	0	3	17	10	150	4.23	0.57

Another essential aspect, character competency, is also measured in this research. Students sent various responses consisting of three statements. During and after conducting the writing project, students confirmed that their persistence in overcoming challenges and obstacles is well-

developed, with a mean score of 3.93 (SD = 0.63), where respondents tend to agree with moderate consistency. Additionally, students developed more discipline in managing their time while engaging in the writing project. With a mean score of 3.70 (SD = 0.71). In this item, respondents are inclined to agree with a bigger variety landscape, it is evidence that students can develop their time management competency naturally through project-based writing. Besides that, in another statement, students also confirmed that through the writing project, they became motivated to deal with the challenges. With a mean score of 4.23 (SD = 0.57). In responding to item 3, respondents tend to strongly agree with high consistency. It shows that project-based writing contributed to developing students' motivation to adapt to potential real-world challenges.

The calculation of the mean score from each competency is further done by the researcher to discover students' 21st-century competency level after following project-based writing. Figure 2 below, displays students 21st century competency level.

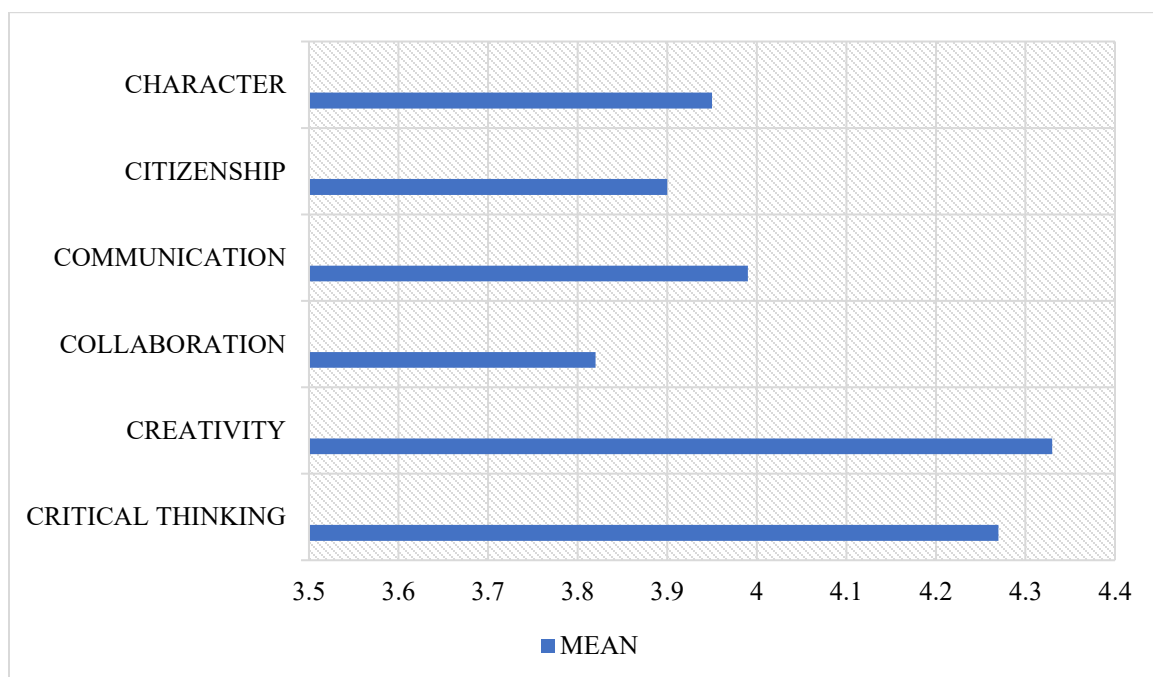


Figure 1. The average mean score of students' 21st-century competency level

The analysis of students' 21st-century competency levels shows All variables showed averages above 3.70, indicating a positive response to project-based writing in shaping 6C



competencies. In this context, Critical Thinking and Creativity have the highest mean, indicating a significant contribution to this competency.

Critical thinking as the first competency to be shaped during project-based writing touches a mean score of 4.27. Respondents had strong perceived values towards the contribution of project-based writing in improving critical thinking skills. Several certain activities, such as conducting research thoroughly to gather valid information, analyzing data and sources, synthesizing ideas to form coherent arguments, and evaluating their work to provide constructive feedback contribute strongly to shaping this competency. Thus, it is no astonishment that after engaging in vigorous and immersive learning experiences, students' critical thinking levels are categorized as very high.

As is seen in Figure 1, students' creativity is also well-shaped after engaging in project-based writing. The mean score of students' perceived values (per responses by students) touches an average mean score of 4.33, which shows that Project-based writing activities are consistently considered to support students' creativity. This score was principally influenced by several experiences when students engaged in writing projects. Tackling various real-world problems and looking for solutions resulted in students' creative thinking gradually. In his activity, students can broaden their creative horizons by exploring various sources and perspectives as writing project tasks often allow suppleness and creative countenance in both the process and the final artifact.

Collaboration competency, on the other hand, as is shown in Figure 1, the average mean score was 3.82 indicating there is scope to improve the collaboration aspect of learning activities. The improvement of the ability to cooperate with others, communicate regularly and effectively, and give good feedback when working on writing projects contributed positively to students' collaboration competency. Doing projects collaboratively will encourage students to have a meaningful learning experience. By working together on a project, students can expand numerous benefits. Distribution of different viewpoints and solutions can lead students to more comprehensive and creative outcomes. Additionally, it assists students in promoting effective communication, conflict resolution, and leadership abilities.

The statistical data of the fourth competency shows students' communication competency is reinforced, but more effort is needed to ensure consistency, represented by an average mean



score of 3.99. In group project work, communication plays a central significant role since it is the core of the project's process. Effective communication guarantees students comprehend the writing project objectives, share ideas unambiguously, and coordinate tasks efficiently. Those aspects when applied consistently will lead to a successful learning outcome. The statistical data analysis results further strengthen the research finding that project-based writing is strongly effective in shaping students' 6Cs competencies.

Project-based writing, according to the statistical analysis result, has a strong impact on shaping students' 21st-century competency. The analysis result illustrates an average mean of 3.9 where Citizenship has diverse perceptions among students, which may reflect differences in context or experience. In promoting students who are academically proficient with socially and ethically aware, this level of competency is decisive. This result underlines the position of integrating citizenship education into instructional planning. It will ensure that students are well-prepared to contribute positively to society.

Ultimately, character competency is developed in students' persistence in overcoming challenges, builds up discipline in managing their time, and motivates them to adapt despite the challenges. With an average mean of 3.95 showing character development through project-based writing was positively received, but with some differences in perception. Such competencies are critical for their personal growth and future success. By educating character competency, project-based writing assists students in building pliability, a strong work ethic, and the aptitude to circumnavigate many obstacles. This well-rounded progress is crucial not only for academic success but also for real-life settings.

Overall, Creativity (4.33) had the highest mean, indicating that respondents gave the most positive assessment of the contribution of project-based writing in this aspect. On the other hand, Collaboration (3.82) had the lowest average, indicating that the development of collaboration through this approach could be improved. Thus, those findings highlighted that project-based writing plays a pivotal role in shaping students' 6Cs competencies. Critical thinking, creativity, collaboration, communication, citizenship, and character competencies are developed gradually alongside the students' engagement in the writing project.

Subsequently, the Standard Deviation varied between 0.49 to 0.88, with some variables such as Communication and Collaboration showing higher variation, indicating differences in perception between respondents as displayed in Figure 2 below:

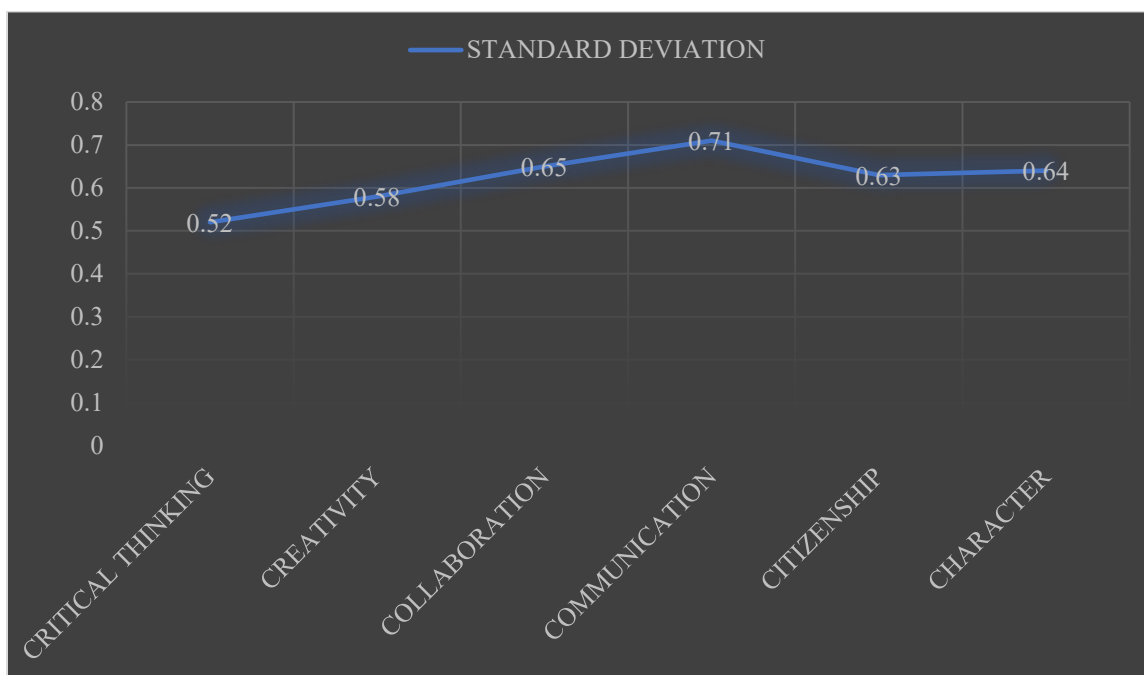


Figure 2. Standard deviation statistical analysis results

Figure 2 visualizes that Critical Thinking competency had the lowest standard deviation (0.52), indicating that respondents were more consistent in assessing the effect of project-based writing on critical thinking. On the other hand, Communication competency had the highest standard deviation (0.71), indicating greater variation in respondents' perceptions of the contribution of project-based writing to communication.

2. Discussion

The study proves that students believe Project-based Writing boosts their ability to critically evaluate information, and analyze-synthesize arguments effectively from different perspectives. These findings are in line with the study of Krisyanti & Taufiq (2023) and Mukti et al. (2020), who accentuate the role of problem-solving in project-based learning activities in the development of analytical skills. Similar findings were conducted by Deveci (2018), who noted



that collaborative projects encourage the development of critical thinking skills in a practical context. Project-based writing is strongly useful for students to shape their competency in thinking and evaluating information critically. In contrast, despite these positive results, challenges continue in implementing critical thinking consistently. Sultan & Javaid (2018) on their study discovered that students sometimes struggle to think critically when there is no adequate scaffolding or feedback from the instructor or lecturer.

The majority of respondents accept improved creativity, the study highlights the usefulness of writing projects in shaping innovative original thinking. In the project-based writing context, the originality of students' thoughts is a key requirement. This is due to students' originality thoughts reflecting the originality of writing works. This resounds with Sarathy (2018), who found that real-world problem-solving tasks, such as project-based writing, encourage students' creative action and creative thinking. In addition, Haniah et al. (2021) also distinguished that online project-based learning can enhance students' creativity over digital task collaboration. As a comparative basis, this research did not differentiate between online and offline sense modality. While these research findings are in a positive tone, (Younis et al., 2021) mentioned that creativity development in Project-based Learning depends on the lecturer's ability to design projects. The project must be balanced and flexible in structure. Without these aspects, students may undergo unnatural or lack direction.

In completing a project, collaborative competence is very crucial in arranging novel ideas and information. The research reveals that students experienced improved collaboration skills, predominantly through consistent communication and feedback throughout group projects. This finding is consistent with Haniah et al. (2021), who stated that Project-based Learning enables students to build up effective teamwork and interpersonal skills. The effectiveness of them arose by simulating real-world collaborative learning environments. Competence in collaboration can also facilitate the provision of feedback both from teachers to students, and between students themselves. However, there are also some limitations in shaping students' collaborative competence through project-based writing. Challenges persist in handling group dynamics, as acknowledged by Mukti et al. (2020), unequal student participation or conflicts results undermine



the benefits of students' collaboration competencies. Addressing these problems involves explicit training in cooperation skills together with Project-based writing assignments.

Equally important, communication is a core foundation of 21st-century competencies. Here, in this research, students perceived substantial growth in their ability to communicate ideas clearly in writing and respond constructively to peer input. Project-based writing not only enhances students' academic performance but also assists them in preparing for the professional and social realm. Clear and constructive communication is essential for collaborative learning environments. It fosters shared respect and understanding among students. These research findings parallel the work of Younis et al. (2021), who accentuated the incorporation of the 6Cs to enhance communication competence in varied cultural contexts. As Project-Based Writing remains underexplored in this study, cross-cultural communication could be essential for comprehensive applications. However, Deveci (2018) found that written communicative competence is less effective if students lack expertise in the language of instruction. Thus, this raises queries about adapting Project-Based Writing approaches for diverse linguistic backgrounds.

Project-Based Writing promotes academic competencies while cultivating social awareness and responsibility in students. Students acknowledge the significance of participating in community-oriented initiatives; it is evident that Project-Based Writing fosters a feeling of civic responsibility and community involvement. The study found that PBL increases social awareness and responsibility, with students recognizing the value of contributing to community-oriented projects. This echoes the findings of Zhao (2019b), who underlined the standing of citizenship education in arming students for ethical and societal challenges. This increase in social awareness and responsibility may result in students being more sympathetic, collaborative, and proactive individuals in their communities. Students acquire an appreciation for collaboration, comprehend other viewpoints, and demonstrate proactivity in addressing real-world challenges. While students perceive value in shaping citizenship competence, Sultan & Javaid (2018) argue that these instructions often lack direct application to students' instantaneous social contexts, reducing their perceived relevance.



The 21st-century competencies not only highlight academic aspects but also pay more attention to character building. The development of perseverance, discipline, and adaptability was evident, students recognized the role of Project-based writing in building pliability and self-management. This hands-on instruction method cultivates resilience and self-management abilities in students, equipping them with a dynamic and constantly evolving environment. These results are reliable with Azorín & Fullan (2022), who stress the integration of character education within PBL frameworks. Contrasting this finding, Kamaruddin et al. (2023) suggest that character development through PBL may differ significantly. This depends on cultural and institutional factors. In certain settings, external pressures may outdo intrinsic motivation. This discovery highlights the significance of considering contextual elements in the implementation of Project-based writing. It indicates that for Project-based writing to optimally enhance character development, educators and institutions must tailor their methods to correspond with the distinct cultural and institutional dynamics of their environments.

Overall, this study concluded that project-based writing can significantly help shape 21st-century competencies. Based on the responses from the students, for each competency, they had a good experience while engaging in the writing project given by the lecturer.

D. Conclusion

This study concludes that Project-Based Writing (PBW) contributes significantly to shaping students' 6Cs competencies, namely Critical Thinking, Creativity, Collaboration, Communication, Citizenship, and Character indicated by students' perceived values. Through the application of PBW, students can improve their analytical thinking skills, generate creative solutions, work collaboratively, convey ideas, understand social responsibility, and develop resilience and self-discipline. These findings suggest that PBW is not only effective in improving academic skills but also in preparing students for real-world challenges by integrating 21st-century skills into the learning process. Participating in PBW enables students to handle real-life challenges that call for creative solutions, which results in the development of critical thinking and innovative thinking. Furthermore, since the collaborative aspect of PBW, students can improve



their communication and cooperation skills by working together and sharing their ideas. As an additional benefit, PBW assists students in properly managing their time and resources, thus fostering the development of self-management and discipline. In today's fast-paced and ever-changing environment, the capacity to navigate complicated tasks and overcome barriers is vital for success. These skills are necessary for overcoming challenges and building resilience. In general, PBW offers students a holistic learning experience that facilitates the development of the skills they will need to be successful in their academic lives as well as in their future professional lives.

E. Limitations

The study into Personality-Based Learning (PBL) at IAIN Curup exhibits limitations, such as a limited sample size, limited data acquisition through questionnaires, an emphasis on student perceptions, an inability to distinguish between online and offline learning modalities, and inadequate analysis of project design.

1. **Limited Research Subjects:** The study only involved 30 students from one institution (IAIN Curup), so the results cannot be generalized to a wider educational context or other institutions.
2. **Instrument Limited to Questionnaires:** Data collection was conducted using a Likert questionnaire, thus not capturing the in-depth dynamics of students' experiences with PBW. Additional interviews or case studies may provide more holistic insights.
3. **Focus on Student Perceptions:** This study emphasizes student perceptions and does not objectively evaluate the effectiveness of PBW through measurement of learning outcomes or academic performance.
4. **Not Separating Learning Modalities:** The research does not differentiate between PBW in online and offline learning, which may affect the implementation results.
5. **Variations in Project Design:** The effectiveness of PBW depends on project design which varies between lecturers, but this study did not explore the influence of project design on 6Cs competency outcomes.

These limitations provide opportunities for further research that could involve more subjects, mixed research methods, and project design analysis to optimize PBW implementation.



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