# A PROJECT-BASED COLLABORATIVE LEARNING MODEL IN ISLAMIC RELIGIOUS EDUCATION TO STRENGTHEN 21ST CENTURY SKILLS OF UNIVERSITY STUDENTS

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#### **Abstract**

The demands of globalization and the Fourth Industrial Revolution require university students to master 21st century skills, including critical thinking, creativity, communication, and collaboration (4C). Islamic Religious Education (IRE) courses hold strategic potential to cultivate these skills when supported by innovative learning models. This study aims to develop and implement a Project-Based Collaborative Learning model in IRE courses to enhance students' 21st century skills. Employing a modified Borg and Gall research and development design, the study involved five stages: needs analysis, design, development, implementation, and evaluation. The participants were 30 undergraduate students at Sultan Agung Islamic University (UNISSULA). Data were collected through observation sheets, 21st century skills questionnaires, and in-depth interviews. The findings indicate that the developed model effectively improves students' critical thinking, teamwork collaboration, creative problem-solving, and academic communication. The average score of students' 21st century skills increased from the "moderate" to the "high" category after the model's implementation. These results highlight that project-based collaborative learning in IRE courses not only strengthens religious competencies but also plays a significant role in preparing students to face the challenges of the 21st century global context.

**Keywords:** Collaborative Learning; Project-Based Learning; Islamic Religious Education; 21st Century Skills; Higher Education

#### **Abstrak**

Tuntutan globalisasi dan Revolusi Industri Keempat mengharuskan mahasiswa perguruan tinggi menguasai keterampilan abad ke-21, termasuk berpikir kritis, kreativitas, komunikasi, dan kolaborasi (4C). Mata kuliah Pendidikan Agama Islam (PAI) memiliki potensi strategis untuk mengembangkan keterampilan ini jika didukung oleh model pembelajaran inovatif. Studi ini bertujuan untuk mengembangkan dan menerapkan model Pembelajaran Kolaboratif Berbasis Proyek dalam mata kuliah IRE guna meningkatkan keterampilan abad ke-21 mahasiswa. Menggunakan desain penelitian dan pengembangan Borg dan Gall yang dimodifikasi, studi ini melibatkan lima tahap: analisis kebutuhan, desain, pengembangan, implementasi, dan evaluasi. Peserta studi adalah 30 mahasiswa sarjana di Universitas Islam Sultan Agung (UNISSULA). Data dikumpulkan melalui lembar observasi, kuesioner keterampilan abad ke-21, dan wawancara mendalam. Temuan menunjukkan bahwa model yang dikembangkan secara efektif meningkatkan kemampuan berpikir kritis, kolaborasi tim, pemecahan masalah kreatif, dan komunikasi akademik mahasiswa. Skor rata-rata keterampilan abad ke-21

mahasiswa meningkat dari kategori "sedang" menjadi "tinggi" setelah implementasi model. Hasil ini menyoroti bahwa pembelajaran kolaboratif berbasis proyek dalam mata kuliah PAI tidak hanya memperkuat kompetensi keagamaan tetapi juga berperan penting dalam mempersiapkan mahasiswa menghadapi tantangan konteks global abad ke-21.

**Kata Kunci:** Pembelajaran Kolaboratif; Pembelajaran Berbasis Proyek; Pendidikan Agama Islam; Keterampilan Abad ke-21; Pendidikan Tinggi

#### INTRODUCTION

The rapid development of globalization and the Fourth Industrial Revolution (Industry 4.0) has fundamentally transformed the landscape of education. The digital economy, artificial intelligence, and automation have disrupted traditional professions, requiring graduates to be adaptive, innovative, and globally competitive. In this era, universities are challenged to prepare students not only with disciplinary knowledge but also with cross-disciplinary competencies that enable them to thrive in uncertain and complex contexts (Schwab & Forum, 2016)(Salgues, 2018).

To meet these demands, higher education institutions emphasize the mastery of 21st century skills, namely the "4Cs": critical thinking, creativity, communication, and collaboration. These skills are widely recognized as key competencies that empower students to solve complex problems, work effectively in diverse teams, and communicate ideas persuasively in global environments (Trilling & Fadel, 2009) (Binkley et al., 2012). Without these competencies, students' risk being left behind in the dynamic global workforce.

Within this context, Islamic Religious Education (IRE) occupies a strategic position. While often viewed primarily as a subject for moral and spiritual formation, IRE has the potential to serve as a bridge between faith-based learning and professional skills development. By integrating cognitive, affective, and psychomotor domains, IRE can cultivate holistic student competencies that align with both religious identity and global citizenship (Sudrajat & Nurjannah, 2021)(Hefner & Zaman, 2016). Thus, IRE should not be confined to doctrinal transmission but re-envisioned as a transformative educational platform. In line with this, recent research shows that the PAI curriculum needs to be contextualized in order to respond to the needs of society in the era of Society 5.0, where modernization and technological developments demand education that not only emphasizes spiritual values, but also critical thinking, collaboration, communication, and creativity skills (Madrah, 2022).

Nevertheless, traditional teaching methods in IRE are often criticized for relying heavily on rote memorization and teacher-cantered instruction, which limit students' opportunities for critical engagement and active learning. Such approaches may hinder the development of creativity, communication, and

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collaboration, thereby reducing the relevance of IRE in addressing contemporary challenges (Azra, 2019) (Halstead, 2004). To remain significant in the 21st century, IRE must adopt innovative pedagogies that align with modern educational paradigms while maintaining its spiritual essence.

Project-Based Collaborative Learning (PBCL) emerges as one promising approach. PBL (Project-Based Learning) has been shown to foster student engagement, critical inquiry, and real-world problem solving (Bell, 2010). When combined with collaborative learning, PBCL enables students to engage in teamwork, exchange ideas, and co-construct knowledge while completing projects with practical relevance. This model not only promotes deeper understanding of academic content but also cultivates essential 21st century skills (Thomas, 2000)(Hmelo-Silver, 2004).

The application of PBCL within IRE is particularly meaningful because Islamic teachings emphasize the values of cooperation, mutual respect, and collective problem solving, as reflected in the Qur'anic principle of ta'awun 'ala albirr wa al-taqwa (cooperation in righteousness and piety, Qur'an 5:2). Integrating PBCL into IRE thus aligns pedagogical innovation with Islamic values, producing learning that is both skill-oriented and spiritually grounded. This synergy can help students internalize religious values while simultaneously enhancing their global competencies.

Therefore, this study seeks to design and implement a PBCL model in IRE courses to strengthen students' 21st century skills while preserving the spiritual essence of Islamic education. Specifically, it aims to explore how PBCL can enhance critical thinking, creativity, communication, and collaboration among university students. By doing so, the research contributes to the discourse on Islamic pedagogy in the 21st century, offering evidence that religious education can be both transformative and globally relevant.

### **METHOD**

This study employed a Research and Development (R&D) approach using a modified Borg and Gall model (Borg & Gall, 1983). The model was chosen because it provides a systematic framework for developing, testing, and validating an educational product—in this case, a Project-Based Collaborative Learning (PBCL) model for Islamic Religious Education (IRE). Five stages were implemented: (1) needs analysis, (2) design, (3) development, (4) implementation, and (5) evaluation.

The participants were 30 undergraduate students enrolled in an Islamic Religious Education course at Sultan Agung Islamic University (UNISSULA), Indonesia, during the academic year 2024/2025. The sample was selected purposively to represent students taking the course as a compulsory subject in the first year.

<u>e-ISSN: 2614-1396</u> p-ISSN: 2614-2740

### **Research Procedures**

- 1. Needs Analysis: Initial exploration was conducted through surveys, classroom observations, and interviews with students and lecturers to identify limitations in current IRE teaching practices and the necessity of integrating 21st century skills.
- 2. Design: A prototype of the PBCL model was designed, including learning objectives, project themes, collaborative mechanisms, assessment rubrics, and integration of Islamic values.
- 3. Development: The learning materials, project guidelines, and collaboration frameworks were developed and validated by two experts in Islamic education and pedagogy. Revisions were made based on feedback.
- 4. Implementation: The PBCL model was implemented over one semester in IRE classes. Students worked in small groups to design and present projects related to contemporary Islamic issues while applying collaborative and problem-solving skills.
- 5. Evaluation: The effectiveness of the model was assessed through quantitative and qualitative methods, focusing on students' 21st century skills and learning experiences.

## **Data Collection**

Data were collected using three main instruments: Observation Sheets: To record classroom interactions, teamwork dynamics, and student engagement during project work. Questionnaires: A standardized 21st century skills questionnaire (adapted from (Binkley et al., 2012)) measured students' competencies in critical thinking, creativity, communication, and collaboration before and after the intervention. In-Depth Interviews: Conducted with selected students to capture perceptions, challenges, and reflections on the PBCL experience.

### **Data Analysis**

Quantitative data from the questionnaires were analyzed using descriptive statistics and paired sample t-tests to compare pre-test and post-test scores of 21st century skills. Qualitative data from observations and interviews were analysed through thematic analysis to identify emerging patterns related to learning experiences, collaborative dynamics, and the integration of Islamic values.

#### RESULTS AND DISCUSSION

The implementation of the Project-Based Collaborative Learning (PBCL) model in Islamic Religious Education (IRE) courses produced significant findings across the five stages of the research and development process. The initial needs analysis revealed that IRE classes at UNISSULA were still dominated by lecture-based and teacher-centered methods. Observations showed limited opportunities for students to practice critical thinking and collaborative problem-solving. Questionnaires distributed to students indicated that their 21st century skills,

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especially creativity and collaboration, were mostly at a moderate level. Interviews also highlighted students' desire for more interactive and project-oriented learning activities. These findings confirmed the urgency of adopting an innovative learning model that integrates academic content with 21st century skills.

# **Planning**

At the planning stage, lecturers of IRE, Bahasa Indonesia, and Civics collaboratively designed an integrated learning plan. The objectives were aligned with the institutional Learning Outcomes (LO) emphasizing integrity, tolerance, and social responsibility. The analysis of the syllabus reveals that the learning outcomes are explicitly designed to integrate Islamic knowledge, religious attitudes, and collaborative skills. For instance, students are assigned to develop video campaigns on Anti-Intolerance, Anti-Corruption, Anti-Sexual Violence, and Anti-Bullying. The findings of this study indicate that the integration of Project-Based Collaborative Learning (PBCL) into the Course Syllabus of the IRE course has successfully promoted the development of 21st century skills (4C: critical thinking, collaboration, communication, and creativity) among students. The design of assignments such as video campaigns on Anti-Intolerance, Anti-Corruption, Anti-Sexual Violence, and Anti-Bullying reflects a pedagogical shift from teacher-centered to student-centered learning, emphasizing authentic and collaborative projects. This is in line with the views of Warsiyah, Madrah, Muflihin, and Irfan, who emphasize that digital literacy is not only related to technical skills in using technology, but also contributes directly to strengthening 21st-century skills, such as creativity, innovation, communication, collaboration, critical thinking, problem solving, and effective decision making (Warsiyah et al., 2022).

This result is consistent with previous research that highlights the effectiveness of PBCL in Islamic Religious Education (IRE) for strengthening 21st century skills. Previous studies have shown that project-based learning (PBCL) contextualized within Islamic values can foster religiosity while equipping students with critical thinking, collaboration, communication, and creativity skills (Al Fithri et al., 2025). Similarly, previous studies have shown that the application of PBCL in PII courses at universities can improve students' communication skills, teamwork, and creativity, although the development of critical thinking skills remains a challenge(Sultoni, 2021). These findings reinforce previous studies that emphasize that PBCL contributes to the development of students' 21st-century skills.

The pedagogical strategies outlined in the syllabus extend beyond conventional approaches such as lectures and case-based learning. They emphasize focus group discussions and project-based learning (PBCL), methods that are globally recognized for fostering active learning and higher-order thinking (Bell, 2010)(Thomas, 2000). This indicates a deliberate pedagogical shift from knowledge transmission toward student-centered and inquiry-driven learning, where learners are not only recipients of knowledge but also active producers of meaningful outputs.

The incorporation of project-based assignments highlights a dual purpose: (1) strengthening students' understanding of Islamic values and ethics, and (2) enhancing their socio-civic awareness of contemporary issues such as intolerance, corruption, and violence. This dual focus reflects the holistic vision of Islamic education that integrates cognitive, affective, and psychomotor dimensions (Syahid, 2024). Through this integration, students are expected to embody religious values while contributing constructively to pluralistic societies.

The assessment structure further underscores the prioritization of authentic learning experiences. With 50% of the final grade allocated to PBCL tasks, compared to 20% for mid-term and 30% for final examinations, the emphasis clearly lies on the process of collaboration and the quality of student-produced projects rather than rote memorization or exam-based performance. This aligns with international best practices in higher education, where performance-based assessment is regarded as a reliable measure of complex skills development (Gulikers et al., 2018). Such evaluation practices align with the recommendations of Saputra, Nitiasih, and Budiarta, who developed authentic assessment rubrics tailored to 21st century learning, emphasizing the measurement of complex skills beyond cognitive knowledge alone. Moreover, the project themes embedded in the Course Syllabus (e.g., intolerance, corruption, and bullying) reveal a strong commitment to linking Islamic moral education with contemporary social issues (Kadek et al., 2023). This integration is in line with the findings of Sihabudin and Sukandar, who argued that PBCL in IRE not only sharpens critical thinking but also nurtures students' ethical and spiritual awareness, thus bridging the gap between religious instruction and real-life challenges (Sihabudin & Sukandar, 2025).

In practice, students are systematically guided to engage in higher-order thinking: Critical thinking is fostered through textual analysis of Qur'anic exegesis and Hadith, alongside reflections on theological and ethical concepts. Collaboration is cultivated through group discussions, focus group dialogues, and joint project development. Communication skills are enhanced via digital presentations and public-oriented campaign videos. Creativity emerges as students design innovative educational media grounded in Islamic ethical values.

Overall, the syllabus demonstrates a coherent model of Project-Based Collaborative Learning in Islamic Religious Education that not only supports the acquisition of religious knowledge but also equips students with global competencies required in the 21st century. This positions Islamic education as both contextually relevant and internationally competitive, bridging the gap between traditional religious instruction and modern skill-based pedagogy. Finally, the effectiveness of PBCL in the course syllabus resonates with broader evidence from general education. For example, Rahman, Zaki, and Pratama confirmed that PBCL statistically improves all four dimensions of 21st century skills among middle school students in Indonesia, further validating its applicability across educational levels

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(Rahman et al., 2025). This reinforces the claim that PBCL, when contextualized in Islamic Religious Education, is not merely a teaching method but a holistic approach to producing graduates who are religiously grounded, socially responsible, and equipped with global competencies.

# **Implementation**

During the first semester, 30 undergraduate students majoring in Mathematics at Sultan Agung Islamic University participated in a Project-Based Collaborative Learning (PBCL) program. The model was implemented across 16 sessions, integrating three courses—Islamic Religious Education (IRE), Bahasa Indonesia, and Civic Education—to strengthen students' interdisciplinary competencies. From the beginning of the semester, students were informed about the upcoming PBCL project and instructed to form groups of 4–5 members. These groups remained consistent throughout the semester, allowing students to develop teamwork dynamics gradually while preparing for the final interdisciplinary project.

Although the project-based integration spanned the entire semester, the explicit interdisciplinary collaboration among the three courses was strategically concentrated in four sessions, particularly when students engaged with the theme of "4A" (Anti-Intolerance, Anti-Corruption, Anti-Sexual Violence, and Anti-Bullying). These sessions served as the core of the collaborative design, in which the intended learning outcomes of Islamic Religious Education (IRE), Bahasa Indonesia, and Citizenship Education were systematically interconnected.

The collaborative process began with joint planning meetings among the three lecturers, where each identified relevant competency that could be meaningfully aligned with the "4A" theme. In the IRE course, emphasis was placed on the moral and spiritual imperatives of rejecting intolerance and corruption, supported by Qur'anic principles and prophetic traditions. Citizenship Education contributed the constitutional and civic dimensions, including human rights, legal frameworks, and democratic values opposing corruption and violence. Meanwhile, the Bahasa Indonesia course equipped students with the ability to articulate their ideas effectively through critical reading, academic writing, and persuasive communication.

During the four integrated sessions, students worked in groups that had been formed at the beginning of the semester. Each group was assigned a subtheme within the "4A" framework and tasked with producing collaborative projects such as posters, short videos, academic essays, or campaign materials. These projects functioned as interdisciplinary outputs that combined religious, civic, and linguistic perspectives. The sessions were conducted through interactive activities—including debates, text analyses, and group discussions—facilitated alternately by the three lecturers, ensuring balanced contributions from all disciplinary lenses.

In contrast, the remaining sessions were conducted within each course independently. Nonetheless, the PBCL framework remained central throughout the

<u>e-ISSN: 2614-1396</u> p-ISSN: 2614-2740 semester, as students were consistently reminded that individual tasks and learning activities would ultimately converge into the final project. For example, in IRE, students reflected on ethical principles such as honesty and justice; in Bahasa Indonesia, they refined their argumentative and expository writing skills; and in Citizenship Education, they engaged with case studies of corruption, intolerance, and civic responsibility in the Indonesian context. These course-specific activities gradually equipped students with disciplinary knowledge and skills, which were then synthesized during the explicitly collaborative sessions.

By the conclusion of the semester, the PBCL project functioned not only as the primary assessment instrument but also as a medium for students to demonstrate their ability to integrate religious values, civic responsibility, and linguistic competence in addressing pressing social issues. This implementation illustrates that effective interdisciplinary collaboration does not require continuous integration in every session, but rather strategically targeted engagements that optimize synergy while maintaining disciplinary depth.

The PBCL implementation unfolded in several structured stages:

# 1. Proposal Writing

Each group prepared a structured proposal outlining strategies to combat corruption, bullying, sexual violence, and intolerance. Importantly, the proposals drew upon both religious frameworks (Qur'anic and prophetic traditions) and civic perspectives, while also being expressed in clear academic writing as required in Bahasa Indonesia.

## 2. Poster Design

Groups created visually engaging posters that served as campaign tools. The posters combined persuasive writing (Bahasa Indonesia), civic awareness (Civic Education), and ethical-religious values (IRE).

## 3. Video Production

The final stage involved producing digital campaign videos advocating for integrity, tolerance, and respect in the academic environment. Video projects highlighted students' ability to merge religious principles with creative digital expression.

Throughout these activities, lecturers acted primarily as facilitators, guiding discussion, ensuring coherence between the three disciplines, and mentoring students in project management. This role distribution shifted the learning environment from teacher-centered to student-driven collaboration, aligning with Johnson and Johnson's cooperative learning model (Johnson & Johnson, 2009).

Overall, the semester-long PBCL experience cultivated not only religious and ethical awareness but also 21st century skills that are vital for future professionals. The integration of Islamic values with civic and linguistic competencies illustrates a holistic educational model that bridges disciplinary boundaries and prepares students to address complex societal challenges.

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**Table 1. PBCL Implementation in Mathematics Students** 

Table 1.1 Bell implementation in Mathematics Students						
Meeting(s)	) Activity	Integration of Courses	f Student Outputs	21st Century Skills (4C)		
-	rOrientation & Group Formation	IRE, Bahasa Indonesia, Civic Education	Group contracts, division of roles	Collaboration (team formation), Communication (agreement setting)		
2–7	Course-specific sessions (conceptual learning: aqidah, ethics, civic duties, academic writing)	foundational	Short essays, reflections, debates	Critical Thinking (analyzing Islamic & civic concepts), Communication (debates & reports)		
8 (Mid- Semester)	Proposal Writing (strategies for 4A issues)	Integrated session: IRE (values), Bahasa Indonesia (academic writing), Civic Education (social policies)	Written proposals on Anti- Intolerance, Anti- Corruption, Anti-Sexual Violence, Anti- Bullying	Critical Thinking (linking texts to issues), Collaboration (group proposal drafting), Communication (academic writing)		
9–10	Poster Design Workshops	Integrated session (IRE: values, Civic: rights/duties, BI: persuasive writing)	Posters for campaign	Creativity (poster design), Collaboration (design teamwork), Communication (visual literacy)		
11–12	Video Production Workshops	Integrated session (IRE, BI, Civic combined)	Campaign videos (digital da'wah and civic ethics)	Creativity (media production), Collaboration (rolesharing), Communication (digital messaging)		
13-14	Presentation & Peer Review	Cross-course integration	Oral presentations, peer feedback	Communication (public speaking), Critical Thinking (evaluating peers)		

Meeting(s)	Activity	Integration o Courses	f Student Outputs	21st Century Skills (4C)
15	Campaign Showcase	Integrated session	posters, social	Integration of all 4C Communication (public speaking), Critical Thinking (evaluating peers)
16	Final Reflection & Evaluation	Joint evaluation session	Reflection essays, group reports	Critical Thinking (self-assessment), Communication (structured report writing)

The implementation of the Project-Based Collaborative Learning (PBCL) model unfolded systematically across 16 class sessions with first-semester mathematics students at Sultan Agung Islamic University. The process illustrates a gradual shift from foundational knowledge-building to interdisciplinary project integration and, finally, authentic assessment.

From the first meeting, students were informed about the PBCL framework and instructed to form groups. This early organization allowed students to cultivate collaboration skills over time, ensuring smoother coordination during later stages. According to (Johnson & Johnson, 2009), such early group establishment promotes interdependence and responsibility, which was evident as students increasingly relied on peer support throughout the semester. Between sessions 2 to 7, each course (Islamic Religious Education, Bahasa Indonesia, and Civic Education) functioned independently, equipping students with the theoretical foundation necessary for project execution. For example, IRE sessions emphasized ethical principles, Civic Education explored civic duties and social responsibility, while Bahasa Indonesia trained students in academic writing and structured expression. Although no explicit interdisciplinary integration occurred during this phase, students were reminded that these skills would converge in the PBCL project, creating anticipation and motivation. The explicit integration of the three courses occurred during four sessions (meetings 8 to 12), focusing on the "4A" themes: Anti-Intolerance, Anti-Corruption, Anti-Sexual Violence, and Anti-Bullying. Here, students collaboratively developed written proposals, campaign posters, and digital videos that incorporated perspectives from all three disciplines. These integrated sessions became the highlight of the semester, showcasing the relevance of interdisciplinary PBCL in addressing both campus and societal challenges. Bell and Thomas explain that authentic projects linked to real-world problems have been shown to foster more intensive engagement and encourage the development of

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higher-order thinking skills, as reflected in student output (Bell, 2010)(Thomas, 2000).

During meetings 13 to 14, groups presented their projects and received structured peer feedback. This phase strengthened both communication (public speaking and academic reporting) and critical thinking (evaluating peers' arguments and suggesting improvements). (Gulikers et al., 2018) argue that such authentic assessments mirror real-world evaluation practices and thus enhance the validity of learning outcomes. Finally, the campaign showcase (meeting 15) and the final reflection session (meeting 16) served as the culmination of the PBCL cycle. Students presented their projects in multimedia formats, ranging from posters and videos to podcasts and social media campaigns, reflecting both creativity and adaptability. Reflection essays and reports allowed them to critically analyze their learning journey, reinforcing metacognitive skills and personal growth.

Taken together, the semester-long PBCL program effectively integrated religious, civic, and linguistic knowledge with the development of 21st-century skills (4C). Students demonstrated the ability to connect Qur'anic teachings with contemporary social issues (critical thinking), distribute roles and work collaboratively (collaboration), produce creative outputs in multiple media formats (creativity), and express their ideas clearly in oral, written, and digital forms (communication). These findings underscore that PBCL, when strategically designed and implemented, can serve as a powerful pedagogical model for cultivating holistic competencies in?

#### **Evaluation**

The PBCL implementation revealed several significant outcomes:

## 1. Critical Thinking

Students demonstrated increased capacity to analyze contemporary challenges through Islamic ethical frameworks. For example, in discussions on digital ethics, groups connected Qur'anic principles of honesty and modesty with online behavior. Some proposals also addressed environmental sustainability from both civic responsibility and Islamic stewardship perspectives.

# 2. Collaboration

Group work fostered strong team dynamics. Because groups were established from the very first session, students had time to develop trust and effective collaboration. By the time the interdisciplinary sessions began, students were already accustomed to distributing tasks, making collective decisions, and supporting peers during challenging phases of the project (e.g., video editing and scriptwriting).

## 3. Creativity

Beyond posters and videos, some groups expanded their projects to include podcasts on Islamic youth empowerment, social media campaigns for ethical online engagement, and community service initiatives rooted in Islamic

teachings. These outputs showcased innovation and adaptability, crucial for addressing real-world issues.

## 4. Communication

Students improved in both oral and written communication. Oral presentations and debates enhanced public speaking skills, while structured reports strengthened academic writing in Bahasa Indonesia. The interdisciplinary nature of the project required students to communicate across religious, linguistic, and civic dimensions, broadening their expressive repertoire.

Qualitative data from interviews further confirmed these findings. Students reported that PBCL made IRE classes more engaging, relevant, and empowering. They appreciated the opportunity to apply Islamic values to real-life challenges and highlighted that working in teams helped them practice patience, respect, and collective responsibility. Overall, the evaluation indicated that the PBCL model was effective in transforming IRE learning into an integrative platform that not only strengthened religious understanding but also cultivated essential 21st century skills.

Evaluation was carried out through a rubric-based assessment covering content mastery, creativity, collaboration, and communication skills. Peer assessment was also integrated to promote fairness and accountability. Critical Thinking: Ability to link Islamic concepts with contemporary social issues such as corruption and intolerance. Collaboration: Effective teamwork and shared responsibility in producing projects. Creativity: Innovative project outputs connecting Islamic and civic values with modern challenges. Communication: Improved oral presentations and written reports.

This is consistent with previous findings that PBCL enhances higher-order thinking skills, social cooperation, and values internalization (Krajcik & Blumenfeld, 2006).

**Table 2. Integration of Courses in PBCL** 

Aspect	Islamic Religious Education (IRE)	Indonesian Language	Citizenship Education	4A Integration (Anti-Bullying, Anti- Intolerance, Anti-Sexual Violence, Anti- Corruption)
Learning Objectives	Instilling Islamic values (ethics, brotherhood, trustworthines,	Developing literacy skills, academic writing, oral	Fostering awareness of citizens' rights and obligations as	Shaping students' character to be religious, critical,

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	justice) in responding to social issues	communicati o, and argumentati on	well as democratic values	communicativ, and responsible in addressing the 4A issues
Core Materials	Qur'anic verses and Hadith related to brotherhood, justice, prohibition of slander, enjoining good and forbidding evil	Techniques for writing proposals, scientific posters, and video scripts	Human rights, anti- discriminatio n, anti- corruption laws, protection against violence	Integrated understanding of the importance of anti-bullying, tolerance, maintaining personal and others' dignity, and honesty
Methods	Qur'anic- Hadith study, religious discussions, reflection on Islamic values	Discussions, academic writing, presentation s, poster and video script production	Case studies, debates, mock trials, legal analysis	PBCL: student collaboration in producing proposals, posters, and videos based on the 4A theme
Expected Products	Reflections on Islamic values in daily life	Proposals, articles, scientific posters, video scripts	Case analyses, policy recommendat ions, public education materials	Collaborative student projects: 4A- themed Proposals, Posters, and Videos
Assessment (Rubric)	Understanding Qur'anic values and their application	Language structure, clarity of argumentati on, originality of work	Accuracy of legal and social analysis	4C: Critical Thinking, Creativity, Collaboration, Communication

# **CONCLUSION**

This study confirms that the application of the Project-Based Collaborative Learning (PBCL) model in Islamic Religious Education (IRE) courses can effectively strengthen students' 21st-century skills, particularly in the areas of critical thinking, collaboration, creativity, and communication (4C). The systematic development and

implementation of PBCL shows a paradigm shift in learning from lecturer-centered to student-centered active learning. The results of the study show that students experienced a significant increase in critical thinking skills through the analysis of Islamic values on contemporary issues, strengthened teamwork, developed creativity in designing learning media, and improved oral and written communication skills. In addition, the integration of Islamic values in PBCL makes the learning process more meaningful because it not only builds academic competence but also strengthens students' spiritual awareness, ethics, and social responsibility. Thus, PBCL has proven to be a relevant and transformative pedagogical model in Islamic Religious Education because it is able to bridge the mastery of religious knowledge, the internalization of Islamic values, and the development of 21st-century global competencies. These findings have important implications for higher education, namely that collaborative and project-based pedagogical innovations should be adopted more widely in order to produce graduates who are religious, critical, creative, communicative, and ready to face the complexities of global challenges in the era of the Industrial Revolution 4.0.

#### REFERENCES

- Al Fithri, Q. A., Soraya, I., & Hamdani, A. S. (2025). Pembentukan Keterampilan Abad 21 Melalui Pembelajaran Project-Based Learning (PJBL) dengan Pendekatan Kontekstual dalam Pembelajaran PAI. *Inteligensi: Jurnal Ilmu Pendidikan*, 7(2), 40–55. https://doi.org/10.33366/ilg.v7i2.6386
- Azra, A. (2019). *Pendidikan Islam: Tradisi dan Modernisasi di tengah Tantangan Milenium III.* Kencana kerja sama dengan UIN Jakarta Press.
- Bell, S. (2010). Project-Based Learning for the 21st Century: Skills for the Future. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, *83*(2), 39–43. https://doi.org/10.1080/00098650903505415
- Binkley, M., Erstad, O., Herman, J., Raizen, S., Ripley, M., Miller-Ricci, M., & Rumble, M. (2012). *Defining Twenty-First Century Skills BT Assessment and Teaching of 21st Century Skills* (P. Griffin, B. McGaw, & E. Care (eds.); pp. 17–66). Springer Netherlands. https://doi.org/10.1007/978-94-007-2324-5\_2
- Borg, W. R., & Gall, M. D. (1983). *Educational Research: An Introduction*. Longman. https://books.google.co.id/books?id=KcE0AAAAMAAJ
- Gulikers, J., Bastiaens, T. J., & Kirschner, P. (2018). Authentic assessment, student and teacher perceptions: The practical value of the five-dimensional framework. *Journal of Vocational Education & Training*, 66(1), 1–20. https://doi.org/10.1080/13636820600955443
- Halstead, J. M. (2004). An Islamic Concept of Education. Comparative Education,

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- *40*(4), 517–529.
- Hefner, R. W., & Zaman, M. Q. (2016). *Schooling Islam: The culture and politics of modern Muslim education*. Princeton University Press.
- Hmelo-Silver, C. E. (2004). Problem-Based Learning: What and How Do Students Learn? *Educational Psychology Review*, 16(3), 235–266. https://doi.org/10.1023/B:EDPR.0000034022.16470.f3
- Johnson, D. W., & Johnson, R. T. (2009). An educational psychology success story: Social interdependence theory and cooperative learning. *Educational Researcher*, *38*(5), 365–379. https://doi.org/10.3102/0013189X09339057
- Kadek, P., Saputra, D., Nitiasih, P. K., Gd, L., & Budiarta, R. (2023). Developing Authentic Assessment Rubric Based on 21st Century Learning Methods for Assessing Second Semester of 11th Grade Senior High School. *Jurnal Ikatan Keluarga Alumni Undiksha*, 21(2), 61–70. https://doi.org/10.23887/ika.v
- Krajcik, J. S., & Blumenfeld, P. C. (2006). Project-Based Learning. In R. K. Sawyer (Ed.), *The Cambridge Handbook of the Learning Sciences* (pp. 317–334). Cambridge University Press. https://doi.org/DOI: 10.1017/CB09780511816833.020
- Madrah, S. S. M. S. A. M. W. W. M. Y. (2022). THE PERCEPTION OF ISLAMIC RELIGIOUS EDUCATION AND ITS IMPLICATIONS FOR CURRICULUM DEVELOPMENT IN THE ERA OF SOCIETY 5.0. *Akademika : Jurnal Pemikiran Islam*, 27(2), 255–266. https://e-journal.metrouniv.ac.id/akademika/article/view/5805/3770
- Rahman, R., Zaki, A., & Pratama, Y. A. (2025). *The Effect of Project-Based Learning on 21st Century Skills in Middle School Students in Indonesia*. 4(1), 17–23.
- Salgues, B. (2018). Society 5.0: Industry of the Future, Technologies, Methods and Tools. Wiley.
- Schwab, K., & Forum, W. E. (2016). *The Fourth Industrial Revolution*. World Economic Forum. https://books.google.co.id/books?id=mQQwjwEACAAJ
- Sihabudin, B., & Sukandar, A. (2025). Project-Based Learning strategy in Islamic Religious Education to enhance students' critical thinking skills. *Islamic Management: Jurnal Manajemen Pendidikan Islam*, 8(2), 1213–1222. https://doi.org/10.30868/im.v8i02.8447
- Sudrajat, A. R., & Nurjannah, A. (2021). Pendidikan Islam Dan Tantangan Modernitas. *At-Tazakki: Jurnal Kajian Ilmu Pendidikan Islam Dan Humaniora*, 5(2), 201–213. https://doi.org/10.46339/foramadiahi.v12i1.233
- Sultoni, A. (2021). The Implementation of Project Based Learning Paper in the Course of Islam Religious Education Learning to Increase 21st Century Skills of University Students BT Proceedings of the International Seminar on Language, Education,

- and Culture (ISoLEC 2021). 1-4. https://doi.org/10.2991/assehr.k.211212.001
- Syahid, N. (2024). Konsep Pendidikan Holistik Dalam Filsafat Pendidikan Islam. MODELING: Jurnal Program Studi PGMI, 11(1), 1185–1196. https://jurnal.stitnualhikmah.ac.id/index.php/modeling/article/view/2535
- Thomas, J. (2000). A Review of Research on Project-Based Learning.
- Trilling, B., & Fadel, C. (2009). *21st Century Skills: Learning for Life in Our Times*. Wiley. https://books.google.co.id/books?id=VUrAvc80B1YC
- Warsiyah, W., Madrah, M. Y., Muflihin, A., & Irfan, A. (2022). Urgensi Literasi Digital bagi Pendidik dalam Meningkatkan Keterampilan Mengelola Pembelajaran. *Dimas: Jurnal Pemikiran Agama Untuk Pemberdayaan, 22*(1), 115–132. https://doi.org/10.21580/dms.2022.221.10042

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