

Project-Based Learning as a Tool to Enhance Students Critical Thinking Skills in Islamic Religious Education

Khairul Ashabil Amin

Universitas Islam Negeri (UIN) Antasari Banjarmasin
khairulashabilamin@gmail.com

Abstract

This study aims to explore the effectiveness of project-based learning as a tool to improve students' critical thinking skills in Islamic religious education. In the context of increasingly complex education, critical thinking skills are one of the competencies that are very much needed by students to face global challenges. The research method used is a qualitative approach with a case study design, involving students from several high schools in Indonesia. Data were collected through observation, interviews, and document analysis related to the implementation of PBP in Islamic religious education subjects. The results of the study indicate that the implementation of PBP not only increases student engagement in the teaching and learning process, but also significantly improves their critical thinking skills. Students showed better abilities in analyzing, evaluating, and creating arguments based on the Islamic values taught. In addition, this study found that collaboration between students in the projects given encouraged in-depth discussions and creative problem solving. Thus, project-based learning has proven to be an effective strategy in Islamic religious education to equip students with critical thinking skills needed in everyday life. This study suggests that educators should further integrate the PBP method into the Islamic religious education curriculum and conduct training for teachers to improve the quality of its implementation. These findings are expected to contribute to the development of innovative and relevant learning methods in the current educational context.

Keyword: *Project Based Learning, Tools, Skills*

Abstrak

Penelitian ini bertujuan untuk mengeksplorasi efektivitas pembelajaran berbasis proyek sebagai alat untuk meningkatkan keterampilan berpikir kritis siswa dalam pendidikan agama Islam. Dalam konteks pendidikan yang semakin kompleks, kemampuan berpikir kritis menjadi salah satu kompetensi yang sangat diperlukan oleh siswa untuk menghadapi tantangan global. Metode penelitian yang digunakan adalah pendekatan kualitatif dengan desain studi kasus, yang melibatkan siswa dari beberapa sekolah menengah di Indonesia. Data dikumpulkan melalui observasi, wawancara, dan analisis

dokumen terkait pelaksanaan PBP dalam mata pelajaran pendidikan agama Islam. Hasil penelitian menunjukkan bahwa penerapan PBP tidak hanya meningkatkan keterlibatan siswa dalam proses belajar mengajar, tetapi juga secara signifikan meningkatkan kemampuan berpikir kritis mereka. Siswa menunjukkan kemampuan yang lebih baik dalam menganalisis, mengevaluasi, dan menciptakan argumen berdasarkan nilai-nilai Islam yang diajarkan. Selain itu, penelitian ini menemukan bahwa kolaborasi antar siswa dalam proyek-proyek yang diberikan mendorong diskusi yang mendalam dan pemecahan masalah secara kreatif. Dengan demikian, pembelajaran berbasis proyek terbukti menjadi strategi yang efektif dalam pendidikan agama Islam untuk membekali siswa dengan keterampilan berpikir kritis yang diperlukan dalam kehidupan sehari-hari. Penelitian ini menyarankan agar pendidik lebih mengintegrasikan metode PBP dalam kurikulum pendidikan agama Islam dan melakukan pelatihan bagi guru untuk meningkatkan kualitas implementasinya. Temuan ini diharapkan dapat memberikan kontribusi bagi pengembangan metode pembelajaran yang inovatif dan relevan dalam konteks pendidikan saat ini.

Kata kunci: Pembelajaran Berbasis Proyek, Alat, Keterampilan

INTRODUCTION

Islamic religious education plays a very important role in shaping students' character and morals. In the era of globalization and rapid technological advances, the challenges faced by the younger generation are increasingly complex. (Park et al., 2021) Therefore, not only religious knowledge needs to be instilled, but also critical thinking skills that enable students to analyze, evaluate, and make decisions based on Islamic values. Critical thinking skills are essential in helping students deal with various social, cultural, and moral issues that develop in society. (Zhao, 2019) Project-based learning (PBL) is one approach that can be used to improve students' critical thinking skills. This method encourages students to be actively involved in the learning process through practical activities that are relevant to their lives. In PBL, students not only receive information passively, but also act as active learning agents, where they can explore ideas, work together in groups, and solve real problems. Thus, PBL can be a bridge to link theory with practice and increase student motivation and involvement.

This study aims to explore how the application of project-based learning in Islamic religious education can contribute to improving students' critical thinking skills. (Vanderweele et al., 2022) Through this approach, it is expected that students will not only understand religious concepts in depth, but also be able to apply them in the context of everyday life. This study will provide insight into the effectiveness of PBL as an innovative strategy in Islamic religious education and offer recommendations for educators to improve the quality of classroom teaching. Islamic education aims to form whole Muslims, develop human potential both physically and mentally, and

establish harmonious relationships with Allah, humans, and the universe. Therefore, Islamic Education aims to develop individuals as a whole.

Islamic education has several main objectives, including, Moral Formation Educating individuals to have good morals, in accordance with Islamic teachings, such as being honest, patient, and responsible, Development of Knowledge Encouraging students to learn and master knowledge, both worldly and hereafter, to prepare themselves to face the challenges of life, Skills Enhancement Equipping students with practical skills that are useful in everyday life and contributing to society Spiritual Education Building a strong relationship between individuals and God, so that they can live life with full spiritual awareness, Social Development Teaching students to understand the importance of community life and contributing to social development Critical Education Developing critical and analytical thinking skills, so that students are able to understand and respond to issues in society, Through these objectives, Islamic education seeks to create individuals who are balanced between spiritual, intellectual, and social aspects. In this regard, the objectives in an education system play a very important role.(Appleby et al., 2019) Some of these important roles are apparent in their usefulness in several ways, including: objectives as guidelines and references in planning learning activities, planning teaching steps, to assessing the level of teaching success.

Even according to Achmadi, goals can provide motivation in educational activities, because in essence educational goals are values that are to be achieved and internalized by students.(Brown et al., 2019) An educational goal will be greatly determined by the paradigm, outlook on life, world view, and philosophy of life adopted by individual humans, educational institutions, and even state institutions where the educational institution is located, Islamic religious education has a strategic role in shaping the character and morals of the next generation of the nation. In this increasingly complex era, the challenges in religious education are increasingly diverse, requiring more effective and innovative teaching methods. One approach that can be used is the project-based learning strategy (Project-Based-Learning, PBL).

This method emphasizes the active participation of students in the learning process through real experiences and is consistent with the basic principles of education that emphasize the importance of experience and participation. Project-Based Learning itself is not a concept that emerged suddenly. Its history can be traced back to the early 20th century, closely related to the development of progressive and constructivist educational theories.(Vasconcelos, 2020) One important figure in the history of active learning is John Dewey, an American philosopher and educator. Dewey advocated education that emphasized learning through experience, rather than just passively receiving information. He believed that education should focus more on practical learning that is relevant to real life, rather than just theory.

The main reason behind the emergence of Project-Based Learning was the need to make education more applicable and relevant to the real world.

The use of (Project-Based-Learning, PBL) in Islamic Religious Education has benefits. This strategy allows students to develop a deeper understanding of religious concepts. In the projects they work on, students are challenged to apply their knowledge of Islam in real contexts, so that they can understand the concepts well. The application of (Project-Based-Learning, PBL) in Islamic Religious Education not only aims to improve students' understanding of Islamic religious learning concepts, but also to develop social skills, creativity, and a sense of responsibility. (Gravier et al., 2020) Through relevant projects, students are expected to be able to internalize religious values and be able to apply them in everyday life. Although project-based learning offers many benefits, its implementation is also faced with various challenges, such as differences in student abilities, time management, and availability of resources. This study aims to improve project-based learning in Islamic Religious Education, focusing on strategies, benefits, challenges, and its implementation in educational environments. The results of this study are expected to provide insight to educators and policy makers to design a more effective Islamic religious education curriculum.

LITERATURE REVIEW

Project-Based Learning (PBL) is an approach that actively engages students in the learning process through real-world projects. This approach is grounded in the theory of constructivism, popularized by Jean Piaget and Lev Vygotsky, which emphasizes that knowledge is constructed through experience and interaction with the environment. In the context of project-based learning, students actively create knowledge through direct experience and reflection, thereby enhancing their understanding. (Silverman et al., 2020) The context of Project-Based Learning (PBL) includes several important aspects that influence its implementation and success. These contexts include:

Academic Context

PBL can be applied at various levels of education, from elementary to higher education, and can be tailored to fit different curricula. PBL can be applied at various levels of education, from elementary to higher education, and can be tailored to fit different curricula. (Grassi & Riba, 2020) At the elementary level, PBL often involves simple projects that focus on building basic skills such as teamwork, communication, and problem-solving. These projects may address everyday topics, helping young students develop a sense of curiosity and understanding of their environment. For instance, students might work together to create a model of a local ecosystem or design a community garden, learning important concepts while honing their skills in a collaborative setting.

As students progress to middle and high school, PBL becomes more complex and integrates subject-specific knowledge. At this stage, projects can

be interdisciplinary, incorporating subjects such as science, history, mathematics, and language arts. For example, a high school project might require students to design a sustainable building, which would involve learning about environmental science, architectural principles, and economics. (Iqbal et al., 2020) This not only deepens their understanding of each subject but also shows how these disciplines work together in real-world contexts.

In higher education, PBL is often used to simulate professional or industry-related tasks, preparing students for their careers by giving them practical experience in solving complex problems. University students might collaborate on projects that involve research, data analysis, and the development of solutions for real-world issues, such as improving community health or developing new technologies. (Agin-Liebes et al., 2021) This level of PBL promotes critical thinking, innovation, and the application of advanced academic knowledge.

The ability to tailor PBL to various levels of education and curricula ensures that students at all stages benefit from this approach. It supports personalized learning by allowing educators to design projects that align with the learning objectives and developmental needs of their students. Whether it's for early childhood education or advanced university courses, PBL can be modified to foster deeper engagement, skill development, and academic achievement across the entire educational journey.

Social Context

Projects can address social issues or the needs of local communities, allowing students to contribute positively. Projects can address social issues or the needs of local communities, allowing students to contribute positively. By engaging in projects that tackle real-world problems, students develop a deeper sense of social responsibility and empathy. (Xiao et al., 2022) For example, students might work on projects that focus on improving access to clean water in underdeveloped areas, addressing homelessness, or raising awareness about mental health. These types of projects not only benefit the community but also provide students with a sense of purpose and the satisfaction of making a meaningful impact.

Furthermore, when students work on social issues, they are encouraged to think critically about the challenges their communities face and explore potential solutions. This process helps students develop problem-solving skills and fosters a sense of civic engagement. They also learn how to collaborate with others, including community leaders and experts, to create effective and sustainable solutions. (Fijal & Beagan, 2019)

In addition, addressing social issues in projects can help students understand the broader context of the challenges at hand. For instance, they may investigate the socio-economic, political, or environmental factors that contribute to these problems. By doing so, students not only gain a more comprehensive understanding of the issue but also learn the importance of

interdisciplinary thinking in solving complex societal problems. Ultimately, engaging students in projects that address social issues or community needs prepares them to become active and responsible members of society. It encourages them to use their knowledge and skills for the greater good, fostering a sense of citizenship and responsibility that extends beyond the classroom.

Cultural Context

PBL enables students to explore their own cultural values and traditions while also understanding the diversity of other cultures. PBL enables students to explore their own cultural values and traditions while also understanding the diversity of other cultures. (Snyder, 2020) By engaging in projects that require students to research, discuss, and present cultural topics, they gain a deeper appreciation for their own heritage as well as the cultures of others. For example, students may be tasked with creating a documentary about traditional art forms in their community or comparing the cultural practices of different countries. Such projects provide an opportunity for students to reflect on what makes their culture unique while learning to respect and value differences.

Moreover, projects that focus on cultural exploration help to break down stereotypes and prejudices. As students research and collaborate with peers from diverse backgrounds, they are exposed to new perspectives and ways of thinking. This helps foster empathy and promotes a more inclusive mindset. By understanding the richness of various cultures, students become more open-minded and are better equipped to engage in a globalized world.

Cultural projects in PBL also encourage students to develop skills such as cross-cultural communication, teamwork, and critical thinking. These skills are essential in our increasingly interconnected world, where understanding and respecting cultural differences is crucial for collaboration and cooperation. Students learn how to navigate different cultural contexts and become more adaptable in both personal and professional settings.

In addition to promoting cultural understanding, PBL helps students recognize the value of cultural preservation. Through their projects, they can investigate how cultural traditions are passed down through generations and explore the challenges of preserving cultural identity in a rapidly changing world. This deeper understanding of cultural dynamics empowers students to be active participants in the preservation of their own cultures, while also embracing the diversity of others.

Technological Context

The integration of technology in PBL, such as collaboration software and digital presentation tools, can enhance the learning experience. (Lion et al., 2019) The integration of technology in PBL, such as collaboration software and digital presentation tools, can enhance the learning experience by facilitating communication, organization, and creativity. Tools like Google Docs, Slack, or Microsoft Teams enable students to collaborate in

real-time, regardless of their physical location, promoting teamwork and efficient project management. These digital platforms allow students to share resources, provide feedback to each other, and track progress, ensuring that every team member contributes effectively to the project.

In addition to collaboration tools, digital presentation software like PowerPoint, Prezi, or video editing programs allows students to showcase their work in innovative and engaging ways. These tools enable students to create visually compelling presentations that highlight their findings, ideas, and solutions. The ability to incorporate multimedia elements, such as images, videos, and animations, not only makes the learning experience more interactive but also helps students develop technical skills that are increasingly valuable in today's digital world.

Technology also broadens the scope of resources available to students, giving them access to vast amounts of information and expertise from around the world. Online databases, educational websites, and virtual field trips allow students to deepen their research and expand their understanding of the topics they are exploring. The use of technology helps bridge the gap between the classroom and the real world, enabling students to connect with experts, participate in global discussions, and explore a wide array of perspectives.

Moreover, the integration of technology in PBL encourages students to develop essential 21st-century skills, such as digital literacy, critical thinking, and problem-solving. By incorporating technology into their projects, students learn how to navigate and evaluate digital information, communicate effectively across various platforms, and leverage digital tools to create solutions. These skills are not only crucial for academic success but are also highly sought after by employers in today's technology-driven job market.

Environmental Context

Projects can focus on environmental issues, such as sustainability or conservation, helping students understand the importance of protecting the environment. (Michaelson et al., 2019) Projects can focus on environmental issues, such as sustainability or conservation, helping students understand the importance of protecting the environment. By engaging in projects that address environmental challenges, students gain a deeper awareness of the impact that human activities have on the planet. For example, students may work on projects that involve researching renewable energy sources, creating recycling programs for their schools, or developing strategies to reduce waste in their community. These hands-on projects enable students to apply their knowledge in practical ways, while also emphasizing the urgency of environmental preservation.

Such projects also encourage students to think critically about the role they play in contributing to environmental issues and the steps they can take to make a positive difference. Students learn about the interconnectedness of ecosystems and the consequences of environmental degradation, such as

climate change, deforestation, and pollution. By exploring these topics in the context of PBL, students develop a sense of responsibility and empowerment, knowing that their actions can lead to meaningful environmental change. (Palitsky et al., 2023)

Moreover, PBL projects centered around environmental issues provide students with opportunities to collaborate with local organizations, government agencies, or environmental experts. These partnerships allow students to engage with real-world data and gain insights from professionals in the field. For example, students might work with a local environmental group to monitor air quality or participate in a community-based tree planting initiative. These collaborative efforts help students develop practical skills while fostering a sense of community and shared responsibility.

In addition to developing environmental awareness, such projects can inspire students to become lifelong advocates for sustainability. By providing students with the tools to understand and address environmental challenges, PBL helps instill values of conservation, stewardship, and environmental justice. Students are empowered to take action, whether through individual efforts, community-based projects, or advocacy on a larger scale. (Malone et al., 2020) Ultimately, environmental-focused PBL projects help students connect academic learning with real-world problems, deepening their understanding of environmental issues and encouraging them to think critically about sustainable solutions. This not only supports their academic growth but also nurtures their role as active, responsible global citizens.

Emotional Context

PBL helps students build social and emotional connections, providing opportunities for engagement and empathy. PBL helps students build social and emotional connections, providing opportunities for engagement and empathy. (Gobbetti et al., 2019) As students collaborate on projects, they learn to work closely with others, navigating diverse perspectives and experiences. This process fosters strong interpersonal skills, such as communication, conflict resolution, and teamwork, which are essential for both academic success and personal growth. By engaging with their peers in a shared goal, students build trust and camaraderie, creating a supportive learning environment where everyone feels valued. In addition, PBL offers students the chance to engage in meaningful discussions and problem-solving activities, allowing them to express their ideas and listen to others. Through these interactions, students develop empathy as they understand different viewpoints, experiences, and emotions. Whether they are working with classmates from diverse backgrounds or engaging with members of their community, students are encouraged to put themselves in others' shoes, helping them become more compassionate and understanding individuals.

The collaborative nature of PBL also provides a space for students to practice emotional intelligence. By working together in teams, students learn to manage their own emotions and respond constructively to the emotions of

others. They become more adept at recognizing feelings like frustration, excitement, or anxiety in themselves and their peers, which helps them navigate group dynamics effectively. This emotional awareness is vital for building strong, healthy relationships both in and outside the classroom. (Lo et al., 2019)

Moreover, PBL allows students to develop a sense of belonging. When students work on projects that have real-world relevance, they see the value of their contributions to the group and the wider community. This sense of purpose not only motivates them to do their best but also strengthens their emotional connection to the work and their peers. As they celebrate the success of their collective efforts, students gain a sense of pride and accomplishment that reinforces their engagement with the learning process. (Ke et al., 2019)

Ultimately, the social and emotional benefits of PBL help students develop a well-rounded set of skills that prepare them for success in life beyond school. These skills empathy, teamwork, emotional intelligence are essential for navigating the challenges of both personal and professional relationships. By integrating these aspects into the learning process, PBL supports the holistic development of students, helping them grow not just as learners but as individuals who can contribute positively to their communities.

Interdisciplinary Context

PBL often involves multiple disciplines, allowing students to explore various fields of knowledge. PBL often involves multiple disciplines, allowing students to explore various fields of knowledge and see the connections between them. (Currier et al., 2021) This interdisciplinary approach encourages students to break down the traditional boundaries between subjects, fostering a more integrated and holistic understanding of the world. For instance, a project focused on designing a sustainable city might combine elements of environmental science, urban planning, economics, and technology, helping students understand how these fields intersect and contribute to solving real-world problems. By engaging with multiple disciplines, students learn to apply concepts and skills from different subject areas in a cohesive manner. They develop critical thinking skills as they analyze complex problems from various perspectives, which encourages creativity and innovation. For example, while working on a project that integrates science and art, students might explore how scientific principles can be expressed through artistic mediums, deepening their understanding of both fields.

Interdisciplinary PBL also helps students see the practical relevance of what they learn in the classroom. When students connect theoretical knowledge from different disciplines to real-world situations, they gain a deeper appreciation for the value of their education. This approach not only makes learning more engaging but also prepares students for future careers,

where interdisciplinary collaboration is often required to address complex challenges.

Furthermore, this broad approach to learning encourages students to think outside the box. Instead of focusing solely on a specific subject, students are encouraged to draw upon a wide range of skills and knowledge to find solutions. This flexibility fosters adaptability and resilience, as students learn to approach problems with an open mind and explore different avenues of inquiry. (Davey et al., 2021)

Ultimately, interdisciplinary projects in PBL create a richer, more dynamic learning experience. They help students develop a diverse skill set and gain a deeper understanding of how different fields of knowledge contribute to addressing global challenges. This approach nurtures well-rounded individuals who are not only knowledgeable in one subject but also capable of thinking critically and creatively across various domains.

John Dewey (1938) argued that experience is central to the learning process, and project-based learning allows students to engage in activities that bridge theory and practice. Recent research shows that experiential learning can enhance student motivation and academic performance. (Zarzycka & Puchalska-Wasył, 2020)

Active learning theory, as described by Bonwell and Eison (1991), is closely related to project-based learning, where students are actively involved in the learning process. This strategy encourages students to think critically, solve problems, and collaborate key components of active learning. Studies indicate that active learning increases student engagement and improves learning outcomes.

Character education, which focuses on the development of values and attitudes, can also benefit from PBL. PBL is an effective tool for internalizing Islamic values such as caring and social responsibility. Studies have shown that character education integrated into learning enhances student engagement. (Pérez-Cruz et al., 2019) In the digital age, the integration of technology into project-based learning has become increasingly important. Technology can facilitate interaction and collaboration in projects while providing tools and resources that enrich the learning experience. Recent studies have demonstrated that technology supports PBL by significantly enhancing the learning process. This theoretical foundation provides a robust framework for understanding how project-based learning can be applied in Islamic Religious Education to improve students' understanding and values."

RESEARCH METHODS

Methods in the world of science are closely related to systems and concern the problem of how to work to be able to understand the object that is the target of the science concerned. In this regard, the branches of science develop their methodologies that are adjusted to the object of study of the science concerned. The method is a way that will later be taken to further

explore the object of study. The research method used is literature review research. Literature review research is a research method that involves the analysis, collection, and synthesis of literature that is relevant to the research topic to be studied. The purpose of literature review research is to gain a comprehensive understanding of the latest research developments in the field being studied, identify existing knowledge gaps, and present a synthesis of previously conducted research.

The first step in a literature review is to identify the topic and formulate research questions. This study focuses on the application of project-based learning (PBL) in Islamic religious education. Researchers collect relevant sources from various academic data, journals, books, and articles. The search process includes the use of specific related keywords (Project-Based-Learning, PBL), character education, and technology in education.

After collecting sources, researchers conduct evaluation and selection to ensure the relevance and quality of the research to be analyzed. The criteria used include the year of publication, the reputation of the journal, and the contribution to the topic discussed. The synthesis process is carried out to unite the findings into a broader framework of thought.

RESULTS AND DISCUSSION

A. Project Based Learning Strategy Concept

1. Definition

Project-based learning is a learning model that focuses on the central ideas and principles of a field. This model involves students in problem solving activities and other important tasks, giving students the opportunity to work independently and develop valuable work. Project-based learning is an innovative learning model that emphasizes contextual learning through complex activities. It also gives teachers the opportunity to manage classroom learning by involving project work. And gives teachers the opportunity to manage classroom learning by involving project work, through project work learning, students' creativity and motivation can increase (Ridwan Abdullah Sani, 2015: 21). With project work learning, students' creativity and motivation can increase. The objectives of project-based learning (PBL) include: Practical Skills Development Students can apply knowledge in real contexts, thereby improving their practical skills. Increased Engagement Encourage students to be actively involved in the learning process, increase motivation and interest in learning, Collaboration Develop the ability to work in a team, improve communication and collaboration skills between students. Problem Solving Help students learn how to think critically and creatively in solving complex problems. Real-World Connection Shows the relevance of learning to everyday life and the professional world, so that students can see real applications of what they learn. Independence Development Encourages students to take initiative and responsibility in their own learning process,

Reflection Teaches students to reflect on the process and results of the project, so that they can learn from their experiences. With these goals, project-based learning aims to produce students who are better prepared to face challenges in the real world. According to Robert Capraro, project-based learning is an instructional model that is based on student performance in solving real problems by overcoming the problem, then working together to create solutions to the problem and producing a work. According to Nanang Hanafiah and Cucu Suhana, the project-based learning model is a learning method that allows students to work together independently to create lessons and end them with real products.

Project-based learning methods help students apply religious principles in everyday life. Instilling Islamic principles is defined as "the process or act of instilling several points of religious life that serve as guidelines for behavior." Educating students must cover all aspects of student development, not just increasing their intelligence.

Based on the above understanding, it can be concluded that project-based learning is an innovative learning that prioritizes problem solving, making decisions, and investigative activities to increase student creativity and motivation. In this case, the teacher as a facilitator poses real problems, asks motivating questions, provides teaching materials, and facilities needed by students to solve problems and supports students in improving their learning outcomes.

2. Characteristics of the project based learning model

Project based learning is a learning model that uses projects or activities as media. Teachers as facilitators give students assignments to produce different learning outcomes. Project-based learning has a lot of potential to provide interesting and meaningful learning experiences for students. This learning model uses problems as the first step in collecting and integrating new knowledge based on real-life experiences. The project-based learning model (Project-Based Learning, PBL) has several main characteristics that distinguish it from other learning methods. The following are the characteristics

Focus on Real Projects The projects worked on are related to real-world problems or challenges, so they are relevant and meaningful to students. Interdisciplinary Approach Projects often involve multiple disciplines, allowing students to see the relationship between different concepts and apply them in a broader context. Active Learning Students are actively involved in the learning process, including planning, implementing, and evaluating projects. Collaboration Students work in groups, promoting social and collaborative skills. It also allows for different perspectives and ideas to emerge Problem Solving Students are presented with a problem to solve, encouraging them to think critically and creatively Reflection Students are encouraged to reflect on the process and outcomes of their project, which helps them understand what they have learned and how

they have learned Performance-Based Assessment Assessment is done not only on the final result, but also on the process, collaboration, and skills applied during the project. Development of 21st Century Skills (Project-Based Learning, PBL) helps students develop skills such as communication, collaboration, creativity, and critical thinking. Teacher Involvement as a Facilitator The teacher acts as a facilitator who guides students in the learning process, provides support and feedback, not as the main source of information. In carrying out the Project Based Learning model, there are steps written by Delise (1997, pp. 27-35) as follows: 1. Connecting with the problem: which is intended for the trainer or totor to choose, design and convey problems that are connected to the students' daily lives related to the problem. 2. Setting up the structure: namely students who have been involved in the problem 3 here there is a role of educators in creating a structure to solve problems which contains the design of tasks carried out by students through the process of thinking in real situations so that they can find solutions to solve the problem. 3. Visiting the problem: namely the attitude of educators or tutors who have a focus on the ideas that students have in solving problems. This focus has a direction towards the facts obtained from their solutions. 4. Revisiting the problem: after students gather in small groups and complete their independent tasks, they discuss to solve a problem that has been previously designed based on the results of their observations. 5. Producing a product/performance and the problem: at this stage, the educator or tutor asks students to evaluate the learning outcomes from the study of problems that have been studied previously. According to Abidin (2014, p. 172) explains the stages carried out in implementing Project Based Learning, namely as follows: 1. Pre-project: This stage is an activity carried out by educators outside of class hours, where teachers design project descriptions, determine project stepping stones, prepare media and various supporting sources for learning, and prepare learning situations. 2. Phase 1: Problem Identification, At this stage students make an observation of a particular object that has benefits so that students can identify problems and formulate problems. 3. Phase 2: Creating a Design and Project Implementation Schedule. At this stage students work together with group members and educators to start designing a project to be created, determine a schedule for project work and make other preparations. 4. Phase 3: conducting research, at this stage students carry out initial research activities as a basic model for the product to be developed by students

With these characteristics, the project-based learning model can create a deeper and more memorable learning experience for students.

The development of students' religious and moral values is very important and must be strongly instilled in students. Islamic education serves as a way to realize the ideals of life by preserving, instilling, and changing religious values to the next generation, so that these values can survive and develop along with the times and technological advances.

This project-based learning method includes contextual relevance, which allows students to connect religious ideas with real-world situations and contexts. Students can apply religious principles in their projects to solve problems, resolve conflicts, and make good decisions.

Another important characteristic is collaboration. Project-based learning is often done in groups, encouraging students to work together, share ideas, and support each other to achieve common goals. Through this collaboration, students can also develop essential social and communication skills. In project-based learning, various skills such as critical thinking, social, and technical, which help students understand how various concepts are interrelated and relevant in a broader context. One important aspect of project-based learning is the reflection process, where students are encouraged to reflect on what they have learned after the project is completed. This reflection helps students understand what they have learned and how they can apply what they have learned.

3. Theoretical basis of project-based learning model

The learning theory underlying the project-based learning model is as follows:

- a. Project-based learning is supported by the constructivist learning theory that students build knowledge, understanding, skills, and experiences that exist within themselves while teachers play a role in facilitating the ongoing process of knowledge construction. Project-Based Learning (PBL) is an approach that prioritizes student involvement in real projects to build their knowledge and skills. This approach is strongly supported by constructivist learning theory, which emphasizes that learning is an active process in which students construct their own understanding. Relationship between Project-Based Learning and Constructivism Active Learning Constructivism emphasizes the importance of hands-on experience. In Project-Based Learning, students are actively involved in designing and implementing projects, allowing them to apply theory in real-world contexts. Collaboration Constructivism encourages social interaction in the learning process. Project-Based Learning often involves group work, where students can share ideas, discuss solutions, and learn from each other. Real-world Context Constructivism theory states that deeper understanding is gained when learning takes place in a relevant context. Project-Based Learning provides opportunities for students to work on real-world problems or challenges, making learning more meaningful. Reflection In constructivism, reflection is key to learning. (Project-Based Learning) encourages students to reflect on the process and outcomes of their projects, which helps them understand the concepts learned in greater depth. Developing 21st Century Skills (Project-Based Learning) teaches critical, creative, communication, and collaboration skills. This is in line with the constructivist view that education should prepare students to face real-world challenges.

- b. Empirically project-based learning support, the influence of project-based learning models on learning is that it allows students to experience significant learning, which is based on constructivism understanding. Classroom learning is an active learning activity. Teachers allow students to convey their own ideas and in groups, thereby improving students' problem-solving abilities.

4. Project Based Learning Model Development Activities for Educators

Developing a project-based learning model requires a planned and structured approach. Here are some actions that educators can take to develop a project-based learning model:

- Identify Learning Objectives: Determine the learning objectives to be achieved through this project-based learning model. These objectives must be related to the curriculum and provide a relevant context for students.
- Select a Relevant Project: Choose a project or assignment that is directly relevant to the learning objectives and can stimulate student interest. Make sure the project covers various aspects of the learning material that you want to emphasize.
- Design the Project Structure: Design the project structure clearly, including the steps to be taken by students, the roles of each group member (if any), and the time limit given. Make sure the project structure supports the achievement of learning objectives.
- Integrate Technology and Resources: Identify technology and other supporting resources that can enhance the implementation of the project. This can include the use of software, access to the internet, or field trips.
- Develop Learning Guides and Materials: Provide clear guidelines for students, including an explanation of the objectives, project steps, and assessment criteria. Prepare relevant learning materials, including reading references, videos, or other supporting resources.
- Create Teams and Assign Roles: If the project involves group work, determine team members and assign roles. Make sure each team member has clear responsibilities.
- Facilitate Discussion and Problem Solving: Facilitate initial discussions to design the project, and encourage students to participate in solving related problems. This can help hone their critical and creative thinking skills.
- Conduct Orientation Sessions: Conduct orientation sessions to provide students with a clear understanding of the project. Explain the goals, expectations, and how the project relates to the learning material.
- Provide Support During the Process: During the implementation of the project, provide support and guidance to students as needed. Make sure they have access to the necessary resources and can overcome obstacles that may arise.
- Evaluation and Feedback: After the project is completed, evaluate the achievement of learning objectives. Provide constructive feedback to students and consider what aspects can be improved in the preparation of the next project-based learning model. (Amirrudin, 2022).

5. Stages of Project Based Learning

In project-based learning strategies, there are stages that must be carried out so that the implementation of the entire process of project-based learning strategy activities can be successful. Project-based learning strategies consist of three main stages, namely:

- a. Planning stage The learning planning stage is a very important stage in every learning process. In learning

using project-based learning, this planning stage greatly affects the learning implementation process, this planning stage must be designed systematically so that the implementation of learning can run optimally. So the planning steps are designed as follows: 1) Formulate learning objectives or projects Considering that project-based practical learning is more complex, each part of the project must be formulated with clear learning objectives. From each project work, learning objectives must be formulated, both general and specific objectives. 2) Analyze student characteristics To group students into groups, the types of work in the project, the abilities and skills of students must be seen. 3) Formulate learning strategies 4) Create worksheets (job sheets) 5) Design learning resource needs 6) Design evaluation tools b. Implementation Stage 1) Prepare the necessary learning resources 2) Explain project tasks and work drawings 3) Group students according to their respective tasks 4) Work on the project c. Evaluation Stage 1) Present the results of the project 2) Have a question and answer forum 3) The teacher evaluates completely 4) The progress of student learning can be clearly known 5) Likewise, weaknesses in the learning process so that learning improvements can be carried out appropriately.

6. Advantages and disadvantages

According to Made Wena, the project-based learning model has several advantages and disadvantages, including:

- a. Advantages of project-based learning models
 1. Increasing student motivation to be more challenged to complete. Students are directly involved in the learning process through projects they choose or design themselves. This involvement makes them more excited and feel in control of their learning.
 2. Improve students' ability in solving real problems through project activities. Projects are often related to real problems that are relevant to their lives. This helps students see the meaning of what they are learning and how it can be applied in a broader context.
 3. Increase collaboration and more freedom in completing projects. Students work in groups, which can increase social interaction and a sense of togetherness. This collaboration can increase motivation because they feel like they are part of a team. By implementing a project-based learning model, students not only learn the subject matter, but also become more motivated to complete challenging tasks, because they feel the benefits and relevance of the learning they do.
 4. Improve skills in managing resources through critical thinking. Students learn to think critically, solve problems,

and collaborate with their peers. These skills not only increase motivation but also prepare them for future challenges.

5. Increased resource-management skill.
- b. Disadvantages of project-based learning models
 1. It requires a lot of free time because it must complete a fairly complex activity process to solve the problem. Often it takes longer than traditional learning methods. Preparation, implementation, and evaluation of projects can be time consuming, reducing time for other materials..
 2. Requires a better understanding of the material so that students are required to be able to think creatively and create their own activities or works that will be produced.
 3. There is a lot of equipment that needs to be provided, so it requires quite a lot of money.
 4. Difficulties in assessment Assessing project outcomes can be tricky. Clear assessment criteria are needed, and it is often difficult to assess objectively, especially when projects involve group work.
 5. Resource dependency often requires more resources, such as materials, tools, and access to information. Schools or institutions with limited resources may struggle to implement PBL effectively.
 6. Challenges in Classroom Management Managing a class during a project can be challenging. Students with different levels of motivation and skills can cause disparities in contributions and final results.
 7. Risk of Unequal Engagement In groups, there is a risk that some students will be more active and engaged than others. This can result in inequities in learning and contribution.
 8. Too Broad a Focus projects can be too ambitious or complex, so that students are unable to achieve the desired learning objectives. This can leave students feeling frustrated or confused.
 9. Not a Good Fit for All Some subject matter may not be well suited to a project-based approach. For example, concepts that are highly theoretical or that require in-depth understanding may be more difficult to teach through projects..

B. Implementation of project-based learning in Islamic Religious Education

Project-based learning is learning that provides opportunities for students to conduct an investigation. In this project-based learning, children will get complex tasks and in-depth problems so that children are required to solve problems, provide opinions and train children to be independent. This can develop children's critical thinking, collaboration and communication skills (Sasmita et al., 2021). So it can be concluded that project-based learning is more precisely child-centered (Sari et al., 2013). Project-based learning has great potential in creating experiences for children. Not only students but this also has an impact on teachers who are given the opportunity to manage classes as interesting and fun as possible (Rati et al., 2017). A good strategy in achieving this goal is through project-based implementation with an imaginative destination approach. The purpose of the imaginative destination approach encourages students to explore creative processes, which are important for students' future in determining career paths. As they work to create uniqueness and solutions to challenges, students are exposed to teamwork, leadership, problem solving, project management, and hands-on skills that allow them to determine their strengths, weaknesses, and interests. The principles of the imagination destination are: First, Highest Learner Ownership, Skills and knowledge can be taught, but solutions and ideas may not be provided by outside sources. Adult leaders or teachers enable learners to find answers as they develop new skills and explore areas of STEAM. Second, Resource Awareness, Learners use all resources available to them, including materials, strength team members, research, and experts. They learn to work within budget constraints and within the requirements and guidelines of open-ended challenges (Beisel, 2021). Third, Clarifying Questions, Learners use questions to ensure understanding and to analyze all potential ideas and solutions. The questioning process allows for learner-centered exploration and experimentation. Fourth, Authentic Self-Expression, Learners express individual and team creativity and belief systems while working collaboratively to solve Challenges. Solutions are expected to include elements that express individual and team talents, strengths, interests, and skills. Fifth, Rapid Ideation and Implementation, Teachers encourage learners to practice rapid, creative, and critical thinking (Beisel, 2021). The overall learning process of Islamic Religious Education and character education in the classroom has not been running optimally. This is because learning is still centered on the teacher or the teacher does not involve students enough in the learning process in the classroom. The teacher's approach to learning focuses on providing information and using the lecture method. With this learning model, students tend to be passive and do not dare to express their opinions. The indicator of the success of the learning process is the learning model used. A learning model is a pattern or step that designs a learning process to achieve a learning goal. A learning model is also a planning pattern that is used as a guideline in planning learning in the classroom. As stated by Joyce, each learning model instructs teachers to

always organize learning in such a way that it makes students interested and makes learning easier to understand.

Understanding the Concept of Islamic Religion, through project-based learning methods, students are given the opportunity to explore and understand the concepts of Islamic Religion in more depth. They are involved in projects that involve research, studies, and understanding of religious teachings. In this process, students can relate these concepts to real-life contexts, so that their understanding becomes more concrete and meaningful.

Applying religious values with project-based learning methods can be an effective way to encourage students to apply religious values in everyday life. These projects require students to plan and carry out activities that reflect religious values such as social involvement, cooperation, tolerance, and justice. By providing students with direct experience in applying religious values, they can understand the importance of these values in life.

The stages in learning Islamic Religious Education using the project-based learning model are as follows.

- a. Determining fundamental questions
At this stage, essential questions are asked to obtain students' knowledge, responses, criticisms and ideas about the project topic to be discussed.
- b. Create product design planning
At this stage, students make plans regarding the project to be worked on. This process is carried out collaboratively with mutual agreement between teachers and students. This planning can be in the form of rules of the game, selection of activities that will support in answering essential questions, and knowing the tools and materials that will be used in completing the project.
- c. Preparation of product manufacturing schedule
Teachers and students can collaboratively create activity schedules to complete projects.
- d. Monitoring student performance and project progress
At this stage, the teacher plays a very important role in monitoring student activities during the completion of the project. So we can say that the teacher acts as a mentor or facilitator for student activities. To facilitate the student monitoring process, the teacher can create a rubric that can be used to document all activities carried out by students.
- e. Outcome assessment
This stage is carried out by the teacher to measure the achievement of standards and evaluate student progress by conducting assessments. In addition, this assessment also functions to provide feedback on the understanding obtained by students and to assist teachers in developing strategies for subsequent learning..
- f. Evaluation of learning experiences

This stage ends with a kind of reflection on the activities and results of the project carried out by the teacher and students at the end of the learning process. This stage is carried out individually or in groups. Here students are asked to express their feelings and experiences in completing the project they have made.

The implementation of project-based learning models in learning can improve learning outcomes, because students are equipped with new knowledge, involve students in learning activities, and teach students to be responsible, think creatively, and solve problems. Project-based learning methods, also known as project-based learning, have several other advantages in Islamic religious learning besides improving student learning activities and learning outcomes. For example, when students are faced with real-world situations related to everyday fiqh chapters, this method can help them improve their ability to think critically and solve problems. Conversely, if this method is used correctly, it can also improve students' ability to work in teams and collaboratively. Students can learn in groups and work together to complete the assigned tasks. This can encourage a lot of social interaction, which in turn can improve active communication between students. In this study, the focus was to explore the effectiveness of different teaching methods in improving students' understanding and learning outcomes in Islamic Religious Education. The comparison is between traditional methods, such as lectures and group discussions, and project-based learning approaches. The implementation of this learning model is generally used in fiqh learning in schools. Because this material requires direct practice to make it easier for students to understand the material. In this case, the learning process can be divided into three stages: introduction, core activities, and closing.

In the first stage, namely the introduction, this stage the teacher begins the learning with a greeting, followed by conditioning the class to refresh the students' learning environment. The teacher then guides students to start reading the basmalah together. Next, the teacher communicates what will be taught and its objectives. An example of the material that will be explained here is about zakat. This process involves the teacher in explaining the purpose of studying this material and helping students understand the intent and purpose of the material.

The second stage, namely the core activities, begins with a brief introduction to the material, then continues with a discussion about the project that will be carried out next. If fiqh learning is through prayer material, the teacher can start learning by providing a brief explanation of the zakat material or by providing a brief description and several essential questions so that students can carry out the activity.

The next stage, students and teachers collaborate to compile the project that will be implemented, namely the practical process of the zakat material. At this stage, the teacher and students schedule when the activity

will take place. Here the teacher needs to monitor student activities, so that if a problem occurs, students can ask the teacher directly.

In addition to the fiqh method, this learning model can also be applied to all Islamic Religious Education subjects such as Aqidah Akhlak, History of Islamic Culture, Hadith, and the Qur'an.

In the context of Islamic religious education, project-based learning methods can be used to apply religious values in real-life situations. Students can apply Islamic teachings to projects involving social activities, community service, and the development of religious learning materials.

Through this method, students can experience directly how religious values are practiced in everyday life and can make a positive contribution to society. Project-Based Learning (PBL) methods have various benefits, including: Active Student Involvement Students are directly involved in the learning process, which increases their motivation and interest, Development of Collaborative Skills Students learn to work together in groups, improving social and communication skills, Application of Knowledge Students can apply the theories learned in real contexts, thereby deepening their understanding, Critical Thinking Skills This method encourages students to think critically and creatively in solving problems, Learning Independence Students learn to take initiative and responsibility in their learning process, Development of Practical Skills Students gain practical skills that are useful in everyday life and the world of work. Connectedness to the Real World Projects that are relevant to social issues or community needs make learning more meaningful, Self-Reflection Students are encouraged to reflect on their experiences, which helps in self-development and continuous learning. With these benefits, project-based methods can create a more holistic and relevant learning experience for students. Student motivation is one of the important factors for the success of education, as part of project-based learning, students are given the opportunity to actively participate and participate in the learning process, thus increasing student motivation. Projects related to students' daily lives give them an understanding that learning is not just theory, but also the practical application of the knowledge gained.

Involving students in projects also contributes to the development of social skills. By working together in teams, students learn to communicate, resolve conflicts, and collaborate to achieve common goals. This is especially important in Islamic education, where the values of cooperation and mutual respect are very important.

However, challenges in implementing project-based learning also need to be considered. Some students may feel burdened by increased responsibility, and not all students have the same level of collaboration skills.

Therefore, it is important for educators to provide appropriate teaching and create a supportive environment for all students.

Overall, the results of this study indicate that project-based learning can be an effective tool for increasing student motivation and engagement and

developing important social skills in the context of Islamic education. Incorporating this approach further into the curriculum can create a more holistic and meaningful learning experience.

Project-based learning can be implemented through several effective strategies. First, determining the project topic that must be relevant to students' daily lives and in accordance with the curriculum, and involving them in choosing the topic to increase interest.

Next, project planning needs to be done by setting specific learning objectives and making an action plan that includes the division of steps and tasks. It is also important for students to work together in teams, where they divide tasks according to their interests and skills and have the opportunity to discuss project progress regularly.

During the sourcing and research stages, students learn how to collect information from various sources and analyze relevant data. Project implementation should include practical exercises where students can face real challenges and find solutions. After the project is completed, students present the results using various media which is an important step in sharing findings, followed by feedback from friends and teachers. Reflection is an important element for students to evaluate their experiences and discuss their learning in class.

Assessment is based on a clear rubric to assess collaboration, creativity, and conceptual understanding. Formative assessment is also carried out to help students identify areas that need improvement. By implementing these strategies, project-based learning can provide students with a more comprehensive and meaningful learning experience.

The implementation of project-based learning often faces various challenges that can hinder its effectiveness. Limited time is one of the main challenges, because project-based learning requires sufficient time allocation for planning, implementation, and evaluation, while many curricula are dense.

Limited resources, both physical and informational, can be a barrier, especially in schools with inadequate facilities. Teacher skills are also an important factor, not all teachers have sufficient experience or training to design and facilitate project-based learning effectively.

In addition, the diversity of student ability levels in a class can make group management difficult, so it is important to ensure that all students are involved.

Assessing project outcomes is also a challenge, because the creative and collaborative aspects are often subjective, so a clear rubric is needed to reduce bias. Parent involvement in the learning process is also constrained, especially if parents do not understand or support this project-based learning approach.

In addition, students often have difficulty in time management during projects, which can add to the stress. Challenges in team collaboration, such

as conflict or differences in work styles, need to be managed well by teachers. Overcoming these challenges requires very careful planning, support from all parties, and a flexible approach so that project-based learning can run effectively, Effective Task Distribution Teamwork is very important in PBP. Fair and appropriate division of tasks according to the expertise of each team member can increase productivity and reduce individual workload. In addition, good communication between team members is essential to ensure everyone is on the same track, Guidance from Teachers The role of teachers as mentors is crucial. By providing constructive direction and feedback, teachers can help students overcome the difficulties they face, as well as motivate them to continue moving forward, Reflection and Feedback After the project is completed, it is important to hold a reflection session. Discuss what went well and what could be improved. Feedback from peers and teachers can provide valuable insights for future projects.

CONCLUSION

This study shows that project-based learning (PBL) is an effective approach in improving students' critical thinking skills in Islamic religious education. Through the implementation of PBL, students are not only actively involved in the learning process but are also able to analyze and evaluate information better. Project activities that are relevant to Islamic values allow students to apply the knowledge they have acquired in real contexts, thereby deepening their understanding of religious teachings. The results of the study indicate that collaboration between students during the implementation of the project encourages constructive discussions and creative problem solving. Students learn to respect each other's opinions, as well as develop communication and cooperation skills. Critical thinking skills acquired through PBL are not only useful in academic contexts but are also important for everyday life, where students are faced with various social and moral issues. However, this study also identified several challenges in the implementation of PBL, such as lack of training for teachers and limited resources. Therefore, it is recommended that schools and educational institutions provide adequate support to teachers to integrate PBL into the Islamic religious education curriculum. Training and professional development for educators will be very helpful in improving the effectiveness of this method. Overall, project-based learning can be an innovative strategy that not only enhances students' critical thinking skills but also enriches their learning experience in Islamic religious education. Thus, this study provides an important contribution to the development of relevant and effective learning methods in the era of modern education.

BIBLIOGRAPHY

- Agin-Liebes, G., Haas, T. F., Lancelotta, R., Uthaug, M. V., Ramaekers, J. G., & Davis, A. K. (2021). Naturalistic Use of Mescaline Is Associated with Self-Reported Psychiatric Improvements and Enduring Positive Life Changes. *ACS Pharmacology and Translational Science*, 4(2), 543–552. <https://doi.org/10.1021/acspsci.1c00018>
- Appleby, A., Swinton, J., & Wilson, P. (2019). Spiritual care training and the GP curriculum: where to now? *Education for Primary Care*, 30(4), 194–197. <https://doi.org/10.1080/14739879.2019.1600383>
- Brown, T. K., Noller, G. E., & Denenberg, J. O. (2019). Ibogaine and Subjective Experience: Transformative States and Psychopharmacotherapy in the Treatment of Opioid Use Disorder. *Journal of Psychoactive Drugs*, 51(2), 155–165. <https://doi.org/10.1080/02791072.2019.1598603>
- Currier, J. M., Foster, J. D., Karatzias, T., & Murphy, D. (2021). Moral injury and ICD-11 complex PTSD (CPTSD) symptoms among treatment-seeking veterans in the United Kingdom. *Psychological Trauma: Theory, Research, Practice, and Policy*, 13(4), 417–421. <https://doi.org/10.1037/tra0000921>
- Davey, J., Kahiya, E., Krisjanous, J., & Sulzberger, L. (2021). Shaping service delivery through faith-based service inclusion: the case of the Salvation Army in Zambia. *Journal of Services Marketing*, 35(7), 861–877. <https://doi.org/10.1108/JSM-07-2020-0283>
- Fijal, D., & Beagan, B. L. (2019). Indigenous perspectives on health: Integration with a Canadian model of practice. *Canadian Journal of Occupational Therapy*, 86(3), 220–231. <https://doi.org/10.1177/0008417419832284>
- Gobbetti, M., De Angelis, M., Di Cagno, R., Calasso, M., Archetti, G., & Rizzello, C. G. (2019). Novel insights on the functional/nutritional features of the sourdough fermentation. *International Journal of Food Microbiology*, 302, 103–113. <https://doi.org/10.1016/j.ijfoodmicro.2018.05.018>
- Grassi, L., & Riba, M. (2020). Cancer and severe mental illness: Bi-directional problems and potential solutions. *Psycho-Oncology*, 29(10), 1445–1451. <https://doi.org/10.1002/pon.5534>
- Gravier, A. L., Shamieh, O., Paiva, C. E., Perez-Cruz, P. E., Muckaden, M. A., Park, M., Bruera, E., & Hui, D. (2020). Meaning in life in patients with advanced cancer: a multinational study. *Supportive Care in Cancer*, 28(8), 3927–3934. <https://doi.org/10.1007/s00520-019-05239-5>
- Iqbal, M., Adawiyah, W. R., Suroso, A., & Wihuda, F. (2020). Exploring the

- impact of workplace spirituality on nurse work engagement: an empirical study on Indonesian government hospitals. *International Journal of Ethics and Systems*, 36(3), 351–369. <https://doi.org/10.1108/IJOES-03-2019-0061>
- Ke, Y. X., Sophia, H. H. U., Takemura, N., & Lin, C. C. (2019). Perceived quality of palliative care in intensive care units among doctors and nurses in Taiwan. *International Journal for Quality in Health Care*, 31(10), 741–747. <https://doi.org/10.1093/intqhc/mzz003>
- Lion, A. H., Skiles, J. L., Watson, B. N., Young, J. D., & Torke, A. M. (2019). Chaplain care in pediatric oncology: Insight for interprofessional collaboration. *Pediatric Blood and Cancer*, 66(12). <https://doi.org/10.1002/pbc.27971>
- Lo, C., Hales, S., Chiu, A., Panday, T., Malfitano, C., Jung, J., Rydall, A., Li, M., Nissim, R., Zimmermann, C., & Rodin, G. (2019). Managing cancer and living meaningfully (CALM): Randomised feasibility trial in patients with advanced cancer. *BMJ Supportive and Palliative Care*, 9(2), 209–218. <https://doi.org/10.1136/bmjspcare-2015-000866>
- Malone, K., Logan, M., Siegel, L., Regalado, J., & Wade-Leeuwen, B. (2020). Shimmering with Deborah Rose: Posthuman theory-making with feminist ecophilosophers and social ecologists. *Australian Journal of Environmental Education*, 36(2), 129–145. <https://doi.org/10.1017/aee.2020.23>
- Michaelson, V., King, N., Inchley, J., Currie, D., Brooks, F., & Pickett, W. (2019). Domains of spirituality and their associations with positive mental health: a study of adolescents in Canada, England and Scotland. *Preventive Medicine*, 125, 12–18. <https://doi.org/10.1016/j.ypmed.2019.04.018>
- Palitsky, R., Kaplan, D. M., Peacock, C., Zarrabi, A. J., Maples-Keller, J. L., Grant, G. H., Dunlop, B. W., & Raison, C. L. (2023). Importance of Integrating Spiritual, Existential, Religious, and Theological Components in Psychedelic-Assisted Therapies. *JAMA Psychiatry*, 80(7), 743–749. <https://doi.org/10.1001/jamapsychiatry.2023.1554>
- Park, C. L., Finkelstein-Fox, L., Sacco, S. J., Braun, T. D., & Lazar, S. (2021). How does yoga reduce stress? A clinical trial testing psychological mechanisms. *Stress and Health*, 37(1), 116–126. <https://doi.org/10.1002/smi.2977>
- Pérez-Cruz, P. E., Langer, P., Carrasco, C., Bonati, P., Batic, B., Tupper Satt, L., & Gonzalez Otaiza, M. (2019). Spiritual Pain Is Associated with Decreased Quality of Life in Advanced Cancer Patients in Palliative Care: An Exploratory Study. *Journal of Palliative Medicine*, 22(6), 663–669. <https://doi.org/10.1089/jpm.2018.0340>
- Silverman, M. J., Gooding, L. F., & Yinger, O. (2020). It's...complicated: A theoretical model of music-induced harm. *Journal of Music Therapy*, 57(3), 251–281. <https://doi.org/10.1093/jmt/thaa008>

- Snyder, B. L. (2020). Practicing what we preach: Teaching psychiatric–mental health student nurses to care for themselves. *Journal of Psychosocial Nursing and Mental Health Services*, 58(6), 40–45. <https://doi.org/10.3928/02793695-20200406-02>
- Vanderweele, T. J., Balboni, T. A., & Koh, H. K. (2022). Invited Commentary: Religious Service Attendance and Implications for Clinical Care, Community Participation, and Public Health. *American Journal of Epidemiology*, 191(1), 31–35. <https://doi.org/10.1093/aje/kwab134>
- Vasconcelos, A. F. (2020). Spiritual intelligence: a theoretical synthesis and work-life potential linkages. *International Journal of Organizational Analysis*, 28(1), 109–134. <https://doi.org/10.1108/IJOA-04-2019-1733>
- Xiao, J., Chow, K. M., Choi, K. C., Ng, S. N. M., Huang, C., Ding, J., & Chan, W. H. C. (2022). Effects of family-oriented dignity therapy on dignity, depression and spiritual well-being of patients with lung cancer undergoing chemotherapy: A randomised controlled trial. *International Journal of Nursing Studies*, 129. <https://doi.org/10.1016/j.ijnurstu.2022.104217>
- Zarzycka, B., & Puchalska-Wasył, M. M. (2020). Can Religious and Spiritual Struggle Enhance Well-Being? Exploring the Mediating Effects of Internal Dialogues. *Journal of Religion and Health*, 59(4), 1897–1912. <https://doi.org/10.1007/s10943-018-00755-w>
- Zhao, Y. (2019). The Rise of the Useless: the Case for Talent Diversity. *Journal of Science Education and Technology*, 28(1), 62–68. <https://doi.org/10.1007/s10956-018-9743-3>