Journal of Learning Improvement and Lesson Study
Volume 04 Number 01 2024, pp, 25- 37
ISSN: Online 2798-9011
DOI: 10.24036/jlils.v4i1.91
Received June 23, 2024; Revised June 27, 2024; Accepted June 29, 2024
Availaible Online: http://jlils.ppj.unp.ac.id/index.php/

Indonesian Art Education with White Cube Learning Environments as an Inclusive Approach for Multicollaborative Learning

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Abstract
This study aims to explore the potential implementation of White Cube Learning Environments (WCLE) as an inclusive learning method in art education in Indonesia. This research focuses on how WCLE can increase collaboration, creativity, and inclusivity among learners from different backgrounds. This study uses a qualitative descriptive approach. This qualitative analysis helps in understanding the perceptions, effectiveness, and challenges of implementing WCLE in the context of education, art practitioners, and physical galleries as multi-collaborators. The findings of this study provide an alternative contribution that WCLE can be an effective learning tool in supporting a more inclusive and collaborative arts education in Indonesia with the scope of smart learning design despite challenges, such as limited infrastructure and resistance from traditional learning approaches. Recommendations for best practices and further implementation strategies become intact recommendations that offer insights for stakeholders in arts education to adopt and adapt these models according to the needs of efficient learning.

Keywords: *White Cube Learning Environments (WCLE), Collaboration, Art Education, Smart Learning Design*

Introduction

Art education in Indonesia currently faces significant challenges in adapting more inclusive and interactive teaching methods, especially in overcoming the rigidity of the dominant traditional methods (Jagodzinski, 2019). Teaching methods that have long been implemented in many arts education institutions tend to emphasize the passive absorption of teaching material, a process in which learners receive only information without substantial interaction or the development of critical thinking (Cosier, 2019; Weinlich, 2018). This approach is often insufficient to support the development of creativity and collaboration, especially among learners from diverse social, cultural, and economic backgrounds. This results in a lack of opportunities for learners to develop the ability to think creatively and work in heterogeneous teams.

This phenomenon makes clear the urgent need to explore and implement more dynamic and adaptive learning approaches to contemporary needs. One of the approaches that has begun to be introduced is through the implementation of White Cube Learning Environments (WCLE). The WCLE concept seeks to transform the classroom into a space similar to an art gallery, where interaction and creative interpretation of teaching materials are the main focus, supporting a more participatory and experimental learning experience.

WCLE is designed to have four learning stages including the modality phase, integration phase, main process phase, and evaluation phase. White Cube Learning Environments (WCLE) adapts a contemporary art gallery design into a learning space, creating a minimalist environment that allows art to communicate without aesthetic distractions. This approach integrates the disciplines of management, arts and technology, encouraging the development of students' critical, analytical and creative skills through real projects such as organizing exhibitions and digital marketing strategies. This model not only enriches theoretical knowledge, but also sharpens students' strategic and operational decision-making abilities, preparing them for professional challenges in the world of art.

Through WCLE, art education is expected not only to improve technical skills, but also to facilitate more holistic and inclusive learning, which focuses on the cognitive and emotional development of learners. The implementation of this approach requires curriculum transformation, teacher training, and comprehensive pedagogical revision,

which goes hand in hand with infrastructure and resource challenges, but has the potential to create a learning environment that is more conducive to innovation and collaboration across disciplines.

Preliminer studies show that arts education institutions in various regions globally have not fully optimized learning environments that support active interaction (Ma dkk., 2021) and collaborative learning (Ylirisku, 2021). There are several significant obstacles (Jordan & O'Donoghue, 2018), 2020), including limited and specific review of the accessibility of the physical infrastructure of creative technology (Talipov & Talipov, 2021), review and support for framing, producing and sustaining more innovative teaching arguments (Denmead, 2020). 2018). This situation emphasizes the importance of conducting more in-depth research. This study is needed to identify how World Class Learning Environments (WCLE) can be integrated effectively in the context of arts education in Indonesia. In connection with this, the research that will be carried out in this research will be able to explore strategic steps to overcome these problems so as to enable the creation of a more conducive learning environment for students. development of creativity and collaboration. It is hoped that this research can provide recommendations based on strong evidence for improving the arts education system which can improve the quality of educational interactions and produce graduates who are more competent and adaptive to the needs of the times.

This research plays an important role because it focuses on the development of strategic evidence-based solutions to improve teaching standards and learning outcomes in arts education institutions. Focusing on an increasingly dynamic educational context, an inclusive and interactive approach to education is not only essential for the development of individual learners' capacities, but also crucial in equipping them with the skills needed to compete in the global job market (Dewi dkk., 2020; Falikhah, 2017). Today's job market demands high collaborative skills and creativity, so education that encourages both aspects is very important.

Furthermore, given the ever-increasing diversity in classroom composition in Indonesia, a more inclusive approach to arts education can create a conducive learning environment where every learner, regardless of social, economic, or cultural background, can actively participate and feel that their contributions are valued. In this regard, the integration into the art education curriculum of collaboration with art galleries is central to the scope of this learning design development, allowing learners to engage in real projects that enhance their understanding of the practical applications of the learned science as well as expand their professional networks. The collaboration not only enriches the learning experience but also supports pedagogic innovations that can be adapted to respond to the needs and challenges of the future of art education.

Through efforts to address the challenges in art education in Indonesia through a structured and evidence-based research approach, this study aims to make a significant contribution in enriching and broadening the horizons of art education in the country. This research seeks to make the arts education curriculum more relevant, engaging, and inclusive, with the hope of increasing the engagement and participation of learners from various social and cultural backgrounds. Through the recommendations produced, it is hoped that stakeholders in arts education can implement strategic changes that will not only improve the quality of education but also ensure equal access and opportunities for all learners to succeed in this field.

Art galleries play a critical role in the governance of artworks (Stabler, 2021), important responsibilities in the maintenance, promotion, and education of the arts, as well as being a bridge between artists and the public. Through descriptive narratives, we can better understand the multifaceted role of art galleries in the broader art ecosystem. The Gallery is responsible for the conservation and maintenance of the artworks, ensuring that these artifacts and artistic expressions can last and be enjoyed by future generations (Milbrandt dkk., 2018). The art gallery also serves as a center for education and inspiration. The gallery often hosts events such as panel discussions, workshops, and guided tours, which help visitors deepen their understanding of art and the creative process (Steiner, 2018). This process encourages critical thinking and a deeper appreciation of art, strengthening the cultural and aesthetic foundations of society.

The importance of collaboration with art galleries is one of the focuses in the recommendations of this research. The collaboration is expected to open up access to authentic and diverse sources of artistic inspiration, provide opportunities for learners to engage directly with contemporary and classical artworks, and interact with experienced artists. This engagement will not only enrich the learning experience of learners, but also expand their professional network in the art world, opening up more career opportunities and professional development. At the end of this study estuary, through the implementation of the model in the WCLE study carried out, it is hoped that it can produce synergies that strengthen the art education ecosystem in Indonesia, making it more dynamic and responsive to the development of the times and the needs of the global creative industry.

The White Cube plays an essential role as the theoretical foundation of this study. The term 'White Cube' refers to an art gallery design that prioritizes simplicity and universality, where white walls and visually undisturbed spaces

are its hallmarks. The space is designed to isolate the artwork from the outside context, focusing visitors entirely on the aesthetic experience presented by the work.

The concept of the White Cube was first introduced by Brian O'Doherty in 1976 in a series of essays titled Inside the White Cube, which was critical of the way traditional art galleries present artwork. O'Doherty argues that such a gallery space, with its sterile and neutral walls, creates a 'timeless' and 'spaceless' context, which highlights artwork as an object that is pure and free from the influence of the outside world. It encourages a deep and reflective form of engagement from visitors, who are not distracted by other decorative or contextual elements.

Through the context of art education, the implementation of WCLE intends to bring the essence of this gallery space into the learning environment. The goal is to stimulate an intense focus on artistic content and facilitate a deeper interaction between learners and artworks. This neutral learning space is expected to reduce external distractions and strengthen learners' capacity to critically absorb and interpret artistic stimuli (Jokela, 2019).

This evolution is driven by the desire to create a 'sacred' environment in the process of practice and aesthetic perception, a work that learners can present and enjoy in conditions that are considered ideal and neutral by curators and art connoisseurs. In the context of art galleries, the concept of the white cube has been used to put pressure on an uninterrupted visual experience, where visitors can connect with art on a very personal and introspective level (Acuff, 2018; Luo & Lau, 2020). This creates an environment that, while paradoxically can feel alienating, also allows for a deep focus on the shapes, colors, and textures presented by the artist.

The implementation of the white cube model, learners can learn to observe, analyze, and respond to artworks in a more controlled and focused way. The environment can also be adapted to showcase learners' work, giving them the opportunity to see their own work in a professional setting, and familiarizing them with the dynamics of a real art exhibition. Further, this model can help in collaboration between learners and art practitioners, by providing a space that equally respects and highlights the work of all parties.

The adaptation of the white cube in art education not only supports more focused and structured art teaching, but also trains learners to think and act as professional art practitioners, preparing them for the wider art industry in a holistic and inclusive way. It creates a platform where art education and practice can meet and collaborate effectively, answering the challenge of art education and practitioner collaboration with elegant and functional solutions.

The arts education curriculum in Indonesia has undergone several changes over the past decade, with the aim of being more inclusive and reflecting the country's rich cultural diversity. The curriculum is designed to not only teach basic art techniques but also to integrate aspects of art history, art criticism, and art theory (Katz-Buonincontro, 2018). However, these curricula are often still limited in scope and have not fully utilized the potential of modern technology and teaching methodologies.

Teaching methods in art education in Indonesia are traditionally dominated by lectures and demonstrations. However, some institutions have begun to adopt more interactive and participatory methods, such as project-based and collaborative learning, which further support the development of learners' creativity and critical thinking (Arini, 2023; Atmojo dkk., t.t.). The use of technology in art classes has also begun to develop, including the use of digital tools in the creation of artworks and the use of online platforms for exhibitions and discussions of works.

The challenges faced by art education institutions in Indonesia are quite diverse. One of the main challenges is the limited resources, including adequate facilities, teaching materials, and teacher training (Rama Kertamukti dkk., 2019). Many schools, especially in remote areas, still struggle to get access to the latest materials and technology, which hinders their ability to provide a rich and immersive learning experience. In addition, there is still a persistent social stigma against the study of the arts as a career path, which often leads to a lack of both financial and moral support from the community and government (Liu, 2020).

Art education faces a number of special challenges that stand out in developing and implementing effective and equitable programs. These challenges include a lack of resources, unequal access, and the need for deeper integration of local cultures in the arts education curriculum. Art education institutions in Indonesia, there are significant shortcomings in terms of facilities, teaching materials, and trained human resources. Indonesia is a country rich in cultural diversity, but art education is often faced with the challenge of effective integration of local cultures in a curriculum that is predominantly influenced by western standards and aesthetics (Jagodzinski, 2019). The importance of recognizing and integrating local cultural elements in art education is not only important for the preservation of the culture itself, but also for developing a sense of appreciation and pride of national identity among learners. The curriculum should be designed to explore and promote local traditional and contemporary arts, providing learners with the opportunity to learn and appreciate their cultural heritage.

White Cube Learning Environments, which adapts the aesthetics and philosophy of modern art galleries, offers a minimalist and focused space, where visual and auditory distractions are minimized. This kind of environment is designed to maximize learners' concentration and allow for a more immersive aesthetic experience (Elder, 2019; Kuttner, 2018).

Evaluations of the use of these spaces in art education show that learner engagement tends to increase. This controlled environment not only increases focus on the subject matter, but also instills a sense of professionalism and seriousness in the learning process. Learners learn to treat the classroom as a studio or gallery, where every detail of art is appreciated and every moment of learning is made the most of it. This fosters greater discipline and dedication to the study of the arts, often leading to more effective and satisfying learning outcomes.

In addition, the quality of artworks produced by learners in white cube learning environments also shows an improvement (Hemmings, 2019; Roddy, 2018). The focus on aesthetics and sensory experiences in this kind of space facilitates bolder and more innovative artistic exploration. Learners tend to take greater creative risks and think more experimentally when they feel that their environment supports authenticity and personal expression. This often results in artwork that is not only more technically sophisticated but also conceptually richer. However, this positive impact must be balanced with considerations about how and when to use white cube learning environments effectively. It is important to integrate these learning methods in a way that does not leave learners or teachers feeling isolated or restricted.

Method

This research uses a qualitative descriptive methodology (Sugiono, 2013) to explore the use of White Cube Learning Environments (WCLE) as an inclusive approach in multicollaborative-oriented arts education. This methodology was considered the most appropriate because it allowed for an in-depth understanding of the perceptions, experiences and effectiveness of this approach from various stakeholder viewpoints, including 2 international art academic practitioners, 2 art academics, 2 interior designers, 2 curators, 4 as well as students who have and 4 students have not taken the exhibition management course.

The data in this research was collected through several techniques to ensure the richness and depth of information, including interviews, participant observation, and document analysis. Semi-structured interviews were conducted with 2 arts academics, 8 students, 2 educational institution managers, and 6 artists to gain insight into their experiences in using WCLE, including the benefits and challenges they faced. Participatory observation allows researchers to directly observe interactions in a learning environment that has integrated the White Cube concept, recording the dynamics of the learning space and its influence on the teaching and learning process. Document analysis involves reviewing documents related to curriculum, learning implementation plans, and learning activity reports, to understand how WCLE concepts are integrated into arts education practices.

A purposive sampling technique was used to select respondents who had direct experience with WCLE, with specific inclusion criteria such as 2 arts academics who had implemented this method, students who studied in this environment, and institutional managers who had started using this approach. Thematic analysis is applied in analyzing data from interviews, observations, and documents, which involves systematically coding data to identify, analyze, and report emerging patterns or themes. To ensure the validity and reliability of the research, triangulation techniques were applied, which involved the use of several data collection methods. In addition, the results of the analysis will be reviewed by experts in the field of 2 arts education to ensure objective and accurate interpretation of the data. It is hoped that this research can provide comprehensive insight into the potential and challenges of using WCLE in the context of arts education.

Results and Discussion

White Cube Learning Environments (WCLE) is an innovative learning methodology designed to embrace diversity and support creativity in arts education. The method consists of four structured stages, namely the Modality, Integration, Core, and Evaluation Phases, each designed to facilitate a specific aspect of the learning process. The following are the detailed stages of the four phases of WCLE in the learning process in Figure 1, Figure 2, Figure 3, and Figure 4.

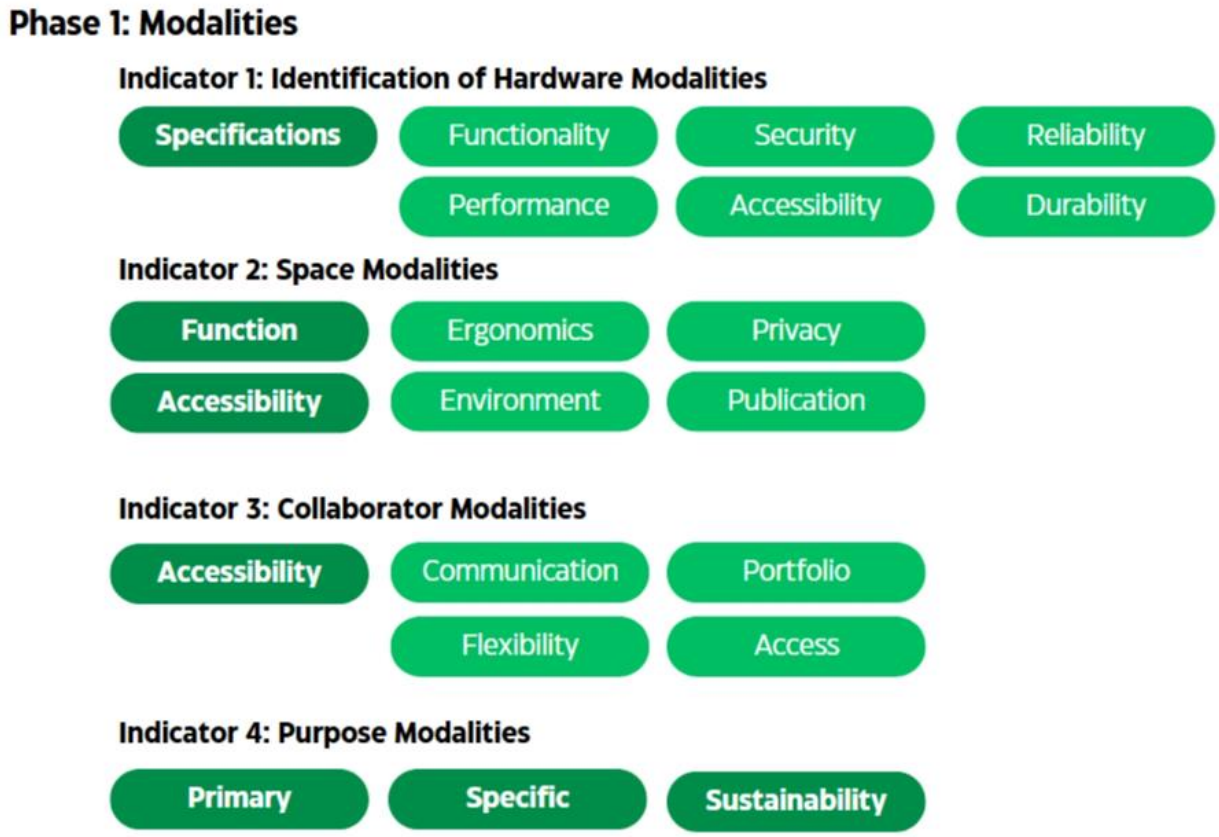

Figure 1. Modality Phase

Through efforts to integrate art education with gallery experiences and artist practice, we face a complex interaction between educators and learners who make the most of space and resources. The model is designed to optimize every aspect of the learning process through the specific use of modalities that have been identified in four key indicators.

The first indicator that identifies the modality of the device ensures that every technical aspect from the specifications, functionality, to the robustness of the device has been adapted to support the learning objectives. Educators in this scenario are not only technology selectors, but also mentors who teach and guide learners in using this technology safely and efficiently. Learners, on the other hand, are invited to actively test and provide feedback on the devices used, thus creating a learning environment that is responsive and adaptive to their needs.

The second indicator relates to the modality of the space, which places a focus on the ergonomics, function, accessibility, and environment of the learning space itself. The gallery space used as a place of learning must support all art activities, ensure privacy and ease of safe publication of works. Educators are responsible for designing and maintaining this space to meet ergonomic and environmentally friendly standards, while learners are expected to use this space responsibly, maintain cleanliness and tidiness, and respect the space and privacy of others.

The third indicator, which focuses on collaborator modalities, is the key aspect of facilitating accessibility, communication, and collaboration between learners. Educators are expected to be able to create an environment conducive to the exchange of ideas and effective collaboration, including providing a platform for joint portfolios and projects. Learners, on the other hand, need to take advantage of this opportunity to develop their communication and collaborative skills, both within the classroom and in broader interactions with the arts community in the fourth indicator.

The fourth indicator underlines the modalities of objectives with a focus on achieving the key, specific, and ongoing learning objectives. In this case, educators must set clear goals that lead to the desired learning outcomes and ensure that all learning activities support the achievement of these goals. Learners are expected to be oriented towards these goals, integrating the lessons learned with their personal and professional aspirations for long-term growth.

Through the effective use of these four modality indicators in the White Cube Learning Environments setting, this learning model not only enriches the learning experience in depth in the field of fine arts, but also prepares learners to enter the professional world as competent artists or curators. By understanding and practicing these values, educators and learners work together to create a dynamic and interactive learning ecosystem, which

ultimately improves the quality of art teaching and learning experiences in the gallery. Furthermore, learning enters phase 2 with a focus on the integration phase between practitioners, galleries, and academics to realize artistic exhibition governance in a white cube.

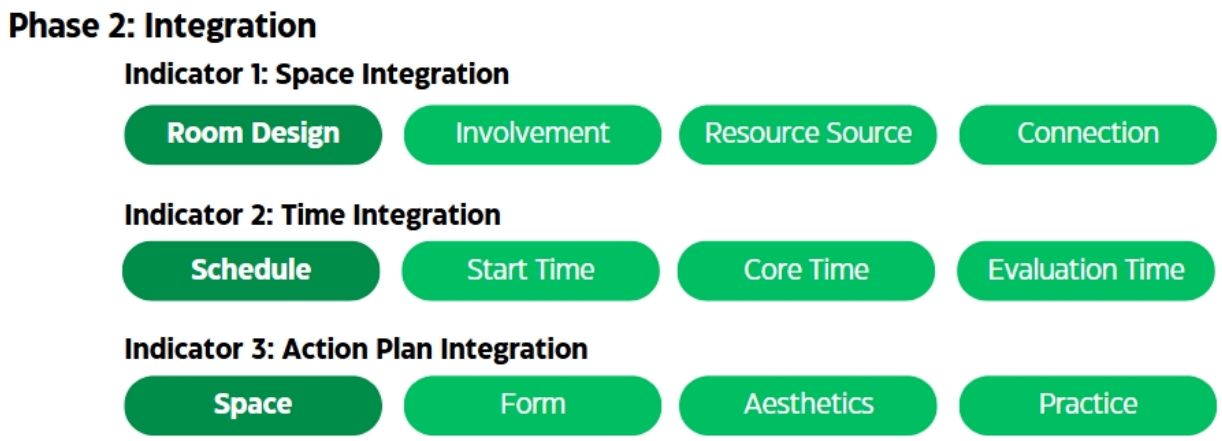

Figure2. Integration Phase

The second phase of this learning model is the second step used, specifically integrated with galleries and practitioners, including the integration of space, time, and action plans. This integration is designed to maximize the learning experience by ensuring that all learning components from physical infrastructure to scheduling and execution of activities are carefully coordinated to support learning objectives.

Spatial Integration is the foundation on which fine arts learning takes place. In this context, educators are responsible for designing and preparing learning spaces that are not only functional but also inspiring. This means setting up a classroom or art studio in a way that allows for easy and creative interaction between learners, as well as between learners and the materials or tools they use. The engagement factor is crucial here; The space should encourage the active participation of all learners, by providing equal opportunities for each individual to contribute and learn. In addition, educators must ensure that necessary resources such as art materials, technological equipment, and access to digital information are available and easily accessible. Finally, connectivity with the outside world, particularly galleries and professional communities, should be facilitated to broaden horizons and opportunities for learners, such as through excursions, artistic collaborations, or joint projects with external artists and practitioners.

The integration of time in art learning is very crucial because the rhythm and flow of activities greatly affect the effectiveness of learning. Educators must plan a well-structured schedule that includes all important activities, from hands-on instruction, time for individual or group practice, to time for reflection and evaluation. The start time of each session should be affirmed to instill discipline and maximize the use of limited study time. In addition, the core time allocation for the development of specific skills such as drawing, painting, or digital design should be sufficient to allow learners to permeate and apply the concepts taught. Regularly scheduled evaluation sessions not only provide an opportunity for educators to assess individual and class progress, but also provide indispensable feedback for learners in reviewing and improving their work.

Action Plan Integration includes the planning and execution of activities designed to harmoniously integrate the elements of space and time with learning objectives. It involves creating activities that use a variety of learning spaces, both inside and outside the classroom, to promote diverse and immersive learning. Activities should be designed not only to develop artistic skills, but also to explore aesthetic principles and their application in real contexts. This kind of practice strengthens theoretical understanding with practical experience, thus enriching the art learning process. In addition, flexibility in the action plan allows for the adaptation of activities based on classroom dynamics and learner responses, thereby strengthening the relevance and effectiveness of the adopted learning approach.

Through the integration of space, time, and action plans, Phase two focuses on creating a holistic and interactive learning environment where learners not only learn art techniques and concepts, but also develop essential skills such as creativity, critical thinking, and collaboration. It supports the development of learners into artists or practitioners who are not only competent in technical skills, but also able to think innovatively and collaborate effectively in a variety of professional and creative contexts. Thus, effective integration in fine arts education through this model places educators as the main facilitators of learning, while learners as active agents in their artistic and professional journey. Furthermore, the learning process will enter phase three as the core phase.

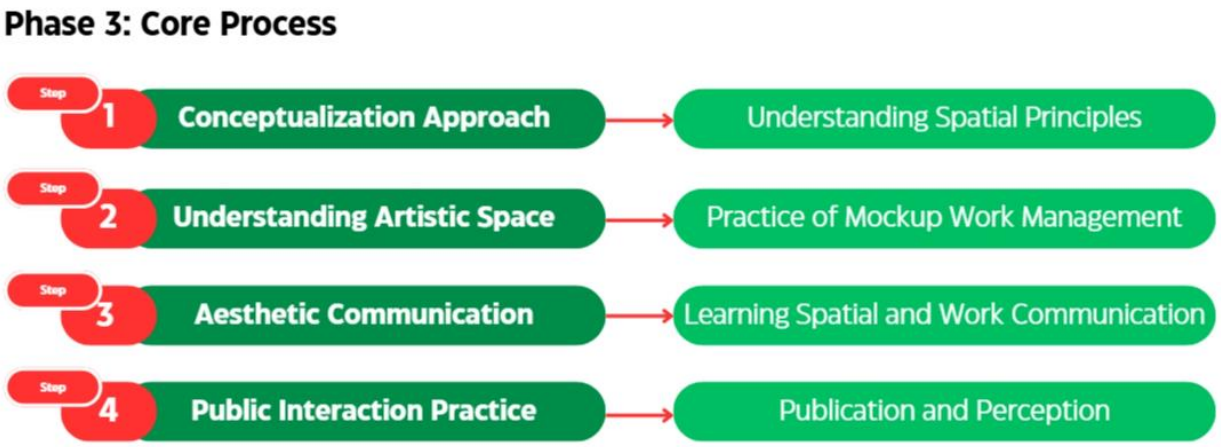

Figure 3. Core Phases of Learning

This stage is crucial in equipping learners with the necessary skills to not only create but also present their artwork to the public. Here are the details of each stage in Phase three. This stage begins with an introduction and understanding of the basic principles of spatial planning in the context of fine art. Educators have a crucial role in guiding learners to explore and understand various art concepts and how these concepts can be realized in physical space. It involves an in-depth discussion of art history, art theory, and contemporary approaches to creating works of art. Learners are invited to think critically about how their ideas can be transformed into communicative and evocative visual works. During this stage, learners begin to design concepts for their own work, using the knowledge gained to develop a better understanding of how spatial principles can affect the perception and interpretation of artwork.

After understanding the conceptual basics, the next stage is to put this knowledge into practice through the creation of a work governance mockup. Here, learners practice arranging their artwork in a simulated or actual space. Educators support this process by providing guidance on how best to organize visual elements to create maximum aesthetic impact. Learners learn how elements such as lighting, viewing distance, and spatial context affect how artwork is perceived by the audience. This activity not only improves learners' practical skills in preparing for art exhibitions, but also deepens their understanding of the dynamics of space and exhibition design (Battista, 2021; Oskay, 2022).

The third stage concentrates on developing communication skills in the context of art. Learners are invited to not only communicate through their artwork but also through various verbal and written mediums. Educators provide training on how to convey the concepts and creative processes behind their work to a wider audience. This includes writing artistic statements, public speaking, and participating in critical discussions. This competency is especially important when artworks are presented in a public setting, where learners must be able to explain and defend their work in front of critics, galleries, and gallery visitors (Potvin, 2021).

The final stage in this phase is the application of public interaction practices, where the artwork is finally presented to the public. This activity is the ultimate test of all the skills that have been developed so far. Learners gain hands-on experience in managing exhibitions, interacting with visitors, and receiving and responding to feedback. Educators provide the platform and logistical support to facilitate these exhibitions, but learners are given primary control over how their work is presented and interpreted. This stage also evaluates the effectiveness of publications and perceptions of the work, providing learners with a valuable opportunity to understand and assess the public response to their work.

Overall, Phase three in this learning model provides learners with the tools and experience necessary to not only create aesthetically appealing artwork but also to successfully present it in a professional context. Through a series of integrated and mutually supportive stages, learners are developed into artists who are not only technically capable but also communicative and responsive to the wider art environment.

Figure 4. Evaluation Phase

This stage focuses on developing and improving communication, creative ideas, and effective file management. Communication of creative ideas is about how learners articulate their artistic vision, both verbally and in writing, to a variety of audiences, including educators, classmates, and critics. File management includes the ability to efficiently organize, store, and access documents, images, and other data related to art projects. Educators provide feedback on the effectiveness and clarity of this communication as well as the systematization of the files that have been used, ensuring that learners can easily access and utilize their work in the future.

This aspect is related to shape aesthetics, spatial aesthetics, artistic communication, and art handling. The aesthetics of form and space are related to the selection and use of shapes, colors, and textures in the works, as well as the placement of the works in the exhibition space. Art handling involves the physical management of artworks, including transportation, storage, and installation, with techniques that ensure the physical integrity of the works. Artistic communication is the way learners interpret and present their work to others, ensuring that the essence of the artistic message is conveyed effectively. Educators assess these skills to ensure that learners understand how every aspect of communication and governance affects the public's perception of their work.

A portfolio is a compilation of works that reflect the learner's artistic skills and evolution. These indicators include the design, physical mockup, layout, and visual impact of the portfolio. Design concerns the aesthetics and usefulness of the portfolio itself, physical mockups are concerned with the physical realization of the design, and layout is the arrangement of works in a portfolio that maximizes the visual and narrative experience for the viewer. Impact refers to the overall effect of the portfolio in conveying the learner's artistic abilities and vision. Educators assist learners in honing their portfolios to ensure that these documents reflect not only technical abilities but also individual artistic uniqueness.

Publications include exhibitions, media publications, scientific publications, and posters accompanying artworks. Exhibitions are a real test of learners' skills in presenting works to the public. Media publications may involve articles or features in print or digital media, while scientific publications may be in the form of journals or papers that discuss the creative process or theoretical context of the work. Posters, whether in an academic or commercial context, must communicate the essence of the work quickly and effectively. This indicator assesses not only technical and aesthetic skills, but also learners' ability to communicate with a wider audience through various mediums to create perceptions.

Over the past decade, the paradigm of art education in Indonesia has undergone a significant transformation, in line with the global evolution towards a more inclusive and collaborative approach to learning (Talipov & Talipov, 2021). WCLE emerged as an innovative learning design in the context of arts education, providing a new framework that supports creativity, inclusivity, and collaboration. This method not only reflects a shift away from traditional learning but also responds to the need for a more adaptive and responsive education to

the diversity of backgrounds and needs of learners. This research aims to explore the potential implementation of WCLE as an inclusive learning method in art education in Indonesia, with a focus on increasing collaboration, creativity, and inclusivity among students (Juste, 2023; Damgacioglu, 2021).

WCLE carries a learning concept inspired by the design and function of a white cube or art gallery space that emphasizes simplicity and neutrality to maximize the aesthetic experience (Ganea-Christu, 2022; Vornhagen, 2019). It is adapted to promote interactive learning that puts the learner's experience of exploring, creating, and crititiquing artwork in an environment that supports freedom of expression and creativity. Through the use of flexible, inclusive, and enabling spaces, WCLE offers opportunities for learners to interact not only with learning materials but also with peers and art practitioners, expanding the collaborative dimension of the learning process.

A qualitative descriptive approach is used in this study to explore how WCLE can be implemented in art education in Indonesia. This method allows researchers to collect in-depth data on perceptions, effectiveness, and challenges in the implementation of WCLE. Through interviews, observations, and documentation studies, this study explores the views of various stakeholders, including educators, learners, and art practitioners, regarding the potential and barriers to WCLE adoption. The findings indicate that WCLE has substantial potential to improve the quality of art learning in Indonesia by facilitating a more open and supportive learning environment.

However, the study also reveals several challenges in the implementation of WCLE, including infrastructure limitations and resistance from traditional learning approaches that are still dominant in many arts education institutions in Indonesia. Adequate infrastructure, such as state-of-the-art technology facilities and flexible learning spaces, is key to optimizing the potential of WCLE. In addition, a paradigm shift in teaching approaches that encourage collaboration and independent exploration needs to be further developed to support the transition to more inclusive learning methods.

Based on these findings, several recommendations for best practices and implementation strategies can be developed. First, it is important for arts education institutions to progressively modernize their infrastructure, not only in the physical context but also in terms of educational resources (Roddy, 2018; Ross dkk., 2021; Silva, t.t.), to support WCLE-based learning. Second, the training of art teachers and educators should include the development of skills in inclusive and collaborative classroom management, as well as the use of educational technology. Third, cooperation between art education institutions and art galleries and the wider artistic community must be strengthened to enrich learners' learning experiences with practical and professional exposure.

The implementation of WCLE as an inclusive approach to multicollaborative learning offers a promising future for arts education in Indonesia. Through efforts to implement and utilize the basic principles of WCLE, arts education institutions in Indonesia can not only improve the quality and relevance of arts education, but also strengthen their position as leaders in educational innovation that embraces diversity and collaboration. This process, while fraught with challenges, is an important step towards the development of creative and adaptive human resources that can thrive in the complexity of contemporary global cultures and economies.

Conclusion

Research conducted on the use of white cube learning environments in art education has shown significant potential in facilitating inclusive and multicollaborative learning approaches. The multi-element collaborative integration of practitioners, academics, and galleries in this art education space allows learners and educators from different disciplines to collaborate in creating and appreciating works of art, fostering rich and in-depth discussions about art, culture, and modern artistic governance. Despite challenges, such as the need for better infrastructure and wider accessibility, the future of arts education with this approach promises a new era where technology and art pedagogy can synergize to form a dynamic and adaptive learning environment, educating a generation that is not only creative but also critical and multi-collaborative by engaging learning enabler elements.

References

Acuff, J. B. (2018). 'Being' a critical multicultural pedagogue in the art education classroom. *Critical Studies in Education*, *59*(1), 35–53. https://doi.org/10.1080/17508487.2016.1176063

Arini, R. E. (2023). Merangkul Teknologi: Mengintegrasikan Realitas Virtual dalam Pengalaman Pembelajaran. *Jurnal Pendidikan West Science*, *1*(06), Article 06. https://doi.org/10.58812/jpdws.v1i6.458

Atmojo, K. T., Fahma, F., & Sutopo, W. (t.t.). *A scheme to increase Indonesian national standard certification in the batik SMEs (case study at XYZ SME)*. 12.

Battista, K. (2021). The White Cube in Virtual Reality. *Architectural Design*, *Query date: 2024-05-25 04:46:15*. https://doi.org/10.1002/ad.2699

Cosier, K. (2019). What Can Art and Art Education Do in the Perilous Present? *Studies in Art Education*, *60*(3), 260–268. https://doi.org/10.1080/00393541.2019.1632635

DAMGACIOGLU, I. (2021). Inherently Political Museums: How Does the White Cube Affect Art's Agency? *Theory and Practice*, *Query date: 2024-05-25 04:46:15*. https://www.themuseumscholar.org/s/TP2021_Damgacioglu.pdf

Dewi, S. P., Ristianti, N. S., & Kurniati, R. (2020). *The Economic Sustainability Model of Community Based Tourism in Batik Kampong Semarang*. 12.

Elder, N. (2019). African American Art and the "White Cube." *The Routledge Companion to African American Art …*, *Query date: 2024-05-25 04:46:15*. https://doi.org/10.4324/9781351045193-30

Falikhah, N. (2017). BONUS DEMOGRAFI PELUANG DAN TANTANGAN BAGI INDONESIA. *Alhadharah: Jurnal Ilmu Dakwah*, *16*(32), Article 32. https://doi.org/10.18592/alhadharah.v16i32.1992

Ganea-Christu, I. (2022). Materiality and Perception in the Arhitecture of Art Exhibiton Spaces. From the white cube to a complex sensory experience. *Argument*, *Query date: 2024-05-25 04:46:15*. https://argument.uauim.ro/en/issues/14/331/

Hemmings, J. (2019). Floppy Cloth: Textile Exhibition Strategies Inside the White Cube. *Textile*, *Query date: 2024-05-25 04:46:15*. https://doi.org/10.1080/14759756.2019.1588688

Jagodzinski, J. (2019). *Postmodern Dilemmas: Outrageous Essays in Art & art Education*. Routledge.

Jokela, T. (2019). Art-Based Action Research for Art Education in the North. *International Journal of Art & Design Education*, *38*(3), 599–609. https://doi.org/10.1111/jade.12243

Jordan, D., & O'Donoghue, H. (2018). Histories of Change in Art and Design Education in Ireland: Towards Reform: the Evolving Trajectory of Art Education. *International Journal of Art & Design Education*, *37*(4), 574–586. https://doi.org/10.1111/jade.12205

Juste, C. (2023). From the White Cube to the Black Box and back: Lighting design for new media art exhibitions. *Déméter. Théories et pratiques artistiques …*, *Query date: 2024-05-25 04:46:15*. https://www.peren-revues.fr/demeter/index.php?id=1346

Katz-Buonincontro, J. (2018). Creativity for Whom? Art Education in the Age of Creative Agency, Decreased Resources, and Unequal Art Achievement Outcomes. *Art Education*, *71*(6), 34–37. https://doi.org/10.1080/00043125.2018.1505388

Kuttner, T. (2018). Approaching the White Cube or Approximating the Streets. *SAUC-Street Art and Urban Creativity*, *Query date: 2024-05-25 04:46:15*. https://www.journals.ap2.pt/index.php/sauc/article/view/115

Liu, T. (2020). To Explore the Inheritance of Computer Multimedia Art Design Based on Traditional Chinese Cultural Elements. *Journal of Physics: Conference Series*, *1574*(1). https://doi.org/10.1088/1742-6596/1574/1/012019

Luo, N., & Lau, C.-Y. (2020). Community-Based Art Education in China: Practices, Issues and Challenges. *International Journal of Art & Design Education*, *39*(2), 445–460. https://doi.org/10.1111/jade.12287

Ma, Z., Guan, J., & Li, R. (2021). Research on Innovative Teaching Mode of Art Education in the Age of Convergence of Media. *International Journal of Emerging Technologies in Learning (iJET)*, *16*(2), 272–284.

Milbrandt, M. K., Miraglia, K. M., & Zimmerman, E. (2018). An Analysis of Current Research in Studies in Art Education and the International Journal of Education Through Art. *Studies in Art Education*, *59*(1), 39–54. https://doi.org/10.1080/00393541.2017.1401882

OSKAY, C. (2022). The South African National Gallery's (SANG) Role in Social Change–Altering the "White Cube." *MSGSÜ Sosyal Bilimler*, *Query date: 2024-05-25 04:46:15*. https://dergipark.org.tr/en/pub/msgsusbd/article/1123780

Potvin, J. (2021). The Queer White Cube: The Art of Contemporary Queer Interventionist Interiors. *Appropriated Interiors*, *Query date: 2024-05-25 04:46:15*. https://doi.org/10.4324/9781003131632-10

Rama Kertamukti, -, Heru Nugroho, -, & S. Bayu Wahyono, -. (2019). Kontruksi ldentitas melalui Stories Highlight Instagram Kalangan Kelas Menengah. *Jurnal ASPIKOM*, *4*(1), Article 1.

Roddy, B. (2018). Beyond the White Cube: Wang Bing at Documenta. *Afterimage*, *Query date: 2024-05-25 04:46:15*. https://search.proquest.com/openview/f8e001f9a9b8ca0f598151fe6d538dae/1?pq-origsite=gscholar&cbl=37068

Ross, N., Sampson, L., & Scott, J. (2021). Soiling the white cube: Artist parent experiences. *Care ethics and art*, *Query date: 2024-05-25 04:46:15*. https://doi.org/10.4324/9781003167556-7

Silva, C. (t.t.). White Cube in Evolution: Lighting and Digital Technology in Beyeler Foundation Architecture. *papers.cumincad.org*, *Query date: 2024-05-25 04:46:15*. https://papers.cumincad.org/data/works/att/sigradi2018_1349.pdf

Stabler, A. (2021). A Sentimental Art Education. *Studies in Art Education*, *62*(1), 63–81. https://doi.org/10.1080/00393541.2020.1859273

Steiner, T. (2018). What is in a Web View: An Analysis of Progressive Web App Features When the Means of Web Access is not a Web Browser. *Companion Proceedings of the The Web Conference 2018*, 789–796. https://doi.org/10.1145/3184558.3188742

Sugiyono, D. (2013). *Metode penelitian pendidikan pendekatan kuantitatif, kualitatif dan R&D.* Alfabeta: Bandung

Talipov, N., & Talipov, N. (2021). CREATIVE TECHNOLOGIES FOR THE DEVELOPMENT OF STUDENTS' CREATIVE ACTIVITY THROUGH ART EDUCATION. *Збірник наукових праць ΛΌГОΣ*. https://doi.org/10.36074/logos-19.03.2021.v3.12

Vornhagen, J. (2019). *Taking the White Cube Home–3D Environments as an ecologically valid alternative to field studies*. *Query date: 2024-05-25 04:46:15*. https://osf.io/m4q6u/download

Weinlich, W. (2018). The Contribution of Art Education to Educational Transitions. *Journal of Elementary Education*, *11*(3), Article 3.

Ylirisku, H. (2021). *Reorienting Environmental Art Education*. Aalto University. https://aaltodoc.aalto.fi/handle/123456789/102921