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Abstract

This research delved into the intersection of art and the United Nations' 17 Sustainability Goals (THE 17 GOALS or SDGs) in education, investigating its applications and impacts from the perspective of art educators on college students. It aimed to fill a void in existing scholarship by examining the nuanced impact of integrating artistic elements into education focused on THE 17 GOALS within the unique socio-cultural context of China. The research explored how art-based initiatives could influence students' perceptions and awareness of THE 17 GOALS. It gathered insights from art educators and professionals through semi-structured, phenomenological interviews, thus enriching the academic and practical discourse on this subject. The results demonstrated that art effectively serves as an educational medium, engaging students in a manner that facilitates unobtrusive and immersive learning, fostering deeper connections and offering a unique, subtle learning experience. By exploring the potential of art as a transformative tool in education concerning THE 17 GOALS, this research contributed to the development of innovative and effective educational strategies. These strategies were designed to engage and enlighten China's younger generations, fostering a globally aware, fully developed, and multifaceted personality within this demographic.

Key Words

Education for Sustainable Development, Sustainable Artistic Pedagogy

Introduction

In the rapidly evolving educational landscape of China, the development of sustainability awareness—inspired by the United Nations' 17 Sustainable Development Goals (THE 17 GOALS)—has transitioned from a mere national policy directive to an integral component of student curricula. The research presented in this thesis focused on art educators' perspectives on the use of art as an exploratory medium in raising awareness of THE 17 GOALS among Chinese college students. The research question investigated in this study was: How do art educators and professionals perceive the role of art in enhancing awareness of the United Nations' 17 Sustainable Development Goals among college students in China?

At the heart of this exploration lay the "Pluralistic Teaching System", a trailblazing educational model in China that epitomizes the essence of educational philosophy—to educate and cultivate well-rounded individuals (Fan & Zhang, 2020). This innovative system seamlessly integrates formal classroom pedagogy (termed as the "First Classroom") with a rich tapestry of experiential and extracurricular learning (conceptualized as the "Second Classroom") (Second Classroom, 2023). This latter dimension of education extends beyond the conventional learning paradigms, embracing a more holistic and qualitative approach that transcends the limitations of textbooks and standardized assessments. It encapsulates a broader spectrum of learning modalities, ranging from vibrant student organizations to immersive community engagements, which are indispensable for fostering a deep societal acumen and a robust communal ethos among students (Second Classroom, 2023).

This study emphasized the "Second Classroom" as a key educational space. It uncovered and described the nuanced yet unexplored implementations and insights of art educators and art professionals in using art as a powerful tool to enhance awareness of THE 17 GOALS among Chinese college students. Employing an educator-centered approach, the study offered a overview of educational dynamics, extending beyond students' subjective experiences to encompass a broader, systemic understanding of education on THE 17 GOALS. Importantly, this approach resonates with the developmental stage of students in their early twenties. At this critical juncture of social and academic learning, students are preparing to actively participate in broader society and articulate the varied perspectives of their generation. The study's focus on the art educators' strategies supports this developmental phase by presenting models of engagement and representation that students can emulate, thus fostering a generation capable of effectively voicing diverse viewpoints in society.

Furthermore, this study delved into the role of urban universities in China, recognized for their innovative and forward-thinking approaches, particularly in how they embedded art as a medium within their THE 17 GOALS initiatives. These urban institutions, often at the forefront of educational advancements, provided an ideal backdrop for this investigation.

Significance

This research addressed a gap in the existing body of literature by exploring the integration of art and THE 17 GOALS within the context of Chinese education. While the impact of art on students has been extensively discussed within a predominantly Western-centric educational narrative, the specific dynamics of integrating art with THE 17 GOALS in an Eastern context, especially in China, had not been thoroughly examined until now.

Furthermore, the research explored how art, as an educational tool, can extend beyond traditional teaching methods to foster sustainable mindsets and behaviors among students. This inquiry was supported by insights from art educators and professionals in the field. By gathering and analyzing these perspectives, the study understood how education related to THE 17 GOALS was implemented by these professionals and the outcomes achieve. While the direct impact of this study on educational practices and policy-making regarding THE 17 GOALS is yet to be determined, it is hoped that the findings will inspire art educators and related professionals to explore more holistic and innovative approaches to introducing social educational topics, and, in the long term, influence educational frameworks to favor experiential learning and creative engagement with broader social issues.

Literature Review

Evolution of Sustainability Education in China

Initially, education on THE 17 GOALS centered around scientific and policy-oriented methodologies, (Ma et al., 2022) reflecting a top-down approach with government-led sustainability goals. However, the transmission of these goals through the country's educational channels has historically shown a disconnect with the pace of innovative educational advancements observed globally. As highlighted by Wang (2015) in many instances, while the Chinese educational system has rapidly adapted to incorporate province-directed sustainability objectives, it has often lagged in embracing the more holistic and interdisciplinary methodologies that are increasingly prevalent in other countries' educational models. This divergence not only reflects differences in pedagogical philosophies but also points to the varying speeds and styles of educational evolution in response to global sustainability challenges.

In recent years, China's educational landscape has experienced a paradigm shift towards incorporating education around THE 17 GOALS as an integral component of social education (Wang, 2015). This shift is driven by governmental and societal recognition of the importance of holistic human development, extending beyond academic performance to include environmental and social responsibility (Wang, 2015). Unlike the earlier educational focus that predominantly emphasized academic grades, current policies advocate for the development of a "full personality", emphasizing social responsibility and sustainability awareness.

Guided by the Ministry of Education, social education in China now encompasses the environmental, social, and economic aspects of sustainable development. The ministry's guidelines encourage the integration of social education within the existing curriculum across various subjects, including geography, chemistry, biology, physics, Chinese language, and moral education (Wang, 2021). This approach aims to cultivate an appreciation of nature and an understanding of the intricate relationship between humans, society, and the natural world. Moreover, the system advocates for diversified evaluations by professional and social organizations, moving beyond traditional academic assessments (Fan & Zhang, 2020).

Specifically, schools like the high school affiliated with Fudan University exemplify the innovative integration of THE 17 GOALS into their curriculum, adopting a holistic approach to sustainability education (Wang, 2021). However, the application of these guidelines is uneven across China, with more

innovative practices observed in economically affluent regions like Shanghai, while other areas continue to offer sustainability education in a fragmented manner through separate subjects (Wang, 2015).

Challenges in Current Sustainability Education

The pedagogical approach to sustainability education based on THE 17 GOALS within integrated subjects often lacks depth, failing to challenge students to critically engage with the causes and consequences of environmental issues (Duan, 2001). This issue is exacerbated by the examination-oriented nature of China's education system, where sustainability content is often neglected if not directly tied to standardized tests (Tan, 2016). Such a system hinders the development of students' awareness and attitudes essential for fostering sustainable lifestyles (Wang, 2021).

The Role of Art in Social Education

In response to the limitations of traditional educational methods in educating on general social topics, the trajectory of integrating art into education within China's higher education system has represented a significant paradigm shift in recent decades (Wang, 2015). This includes education on THE 17 GOALS. This evolution reflects a broader global trend towards interdisciplinary education, where art is increasingly recognized as a vital tool for engaging students in complex societal issues like sustainability (York, 2014). United Nations Educational, Scientific and Cultural Organization (UNESCO) underscores the potential of arts and cultural education to empower learners with the knowledge, skills, values, and attitudes needed to address various global challenges (Wang, 2021).

Art, in its myriad forms – from traditional visual arts to interactive multimedia installations – offers a unique blend of visual stimulation and emotional resonance. It provides a platform for viewers to engage with sustainability themes, integrating personal experiences, thoughts, and emotions into their interpretation, which facilitate a personal and emotional connection to the subject matter, enriching audience' understanding and commitment to sustainability. This aspect of art makes it an exceptionally dynamic and engaging tool in Education for Sustainable Development (ESD).

Emerging Educational Paradigms

In the Chinese educational system, the "Pluralistic Teaching System", exemplified by the "Second Classroom," is increasingly being integrated into the fabric of school education (Second Classroom, 2023). Urban Chinese universities, particularly, are pioneering this integration with their diverse exposure to art and cultural expressions. This alignment with progressive educational trends and policies not only

enhances the immediate learning environment but also sets a precedent for future educational frameworks that value creativity and holistic learning in addressing complex global issues like sustainability.

In this study, terms such as "art integration in sustainability education" and "sustainable artistic pedagogy" have been meticulously chosen to highlight the innovative merging of artistic mediums with education on THE 17 GOALS (Hunter et al., 2018). These terms signify a departure from traditional educational paradigms by positioning art not as a supplementary element but as a central, transformative force in education.

"Art integration in sustainability education" refers to the strategic incorporation of various art forms into the teaching and learning of sustainability, aiming to engage students (or learners) more deeply and meaningfully.

"Sustainable artistic pedagogy" denotes an innovative approach to education that harnesses the power of art to communicate and contextualize sustainability themes, thereby cultivating creative thinking, problem-solving skills, and a profound understanding of environmental and social issues (Hunter et al., 2018).

By intertwining art as a teaching medium with education on THE 17 GOALS, this approach acknowledges and addresses the growing demand for educational models that cater to diverse learning styles and foster comprehensive understanding. It is not merely about adding art to the curriculum; it's about reinventing the educational narrative to make sustainability learning more engaging, relatable, and impactful for students.

Global Perspectives and Practices

The integration of art as a teaching medium education on THE 17 GOALS has gained momentum globally, with various innovative initiatives demonstrating its effectiveness. These examples not only illustrate diverse applications of art in education but also provide a rich source of inspiration and learning for similar efforts in China.

In Brazil, the "Globinho Activists" Program at Colégio Santa Chiara is a prime example of art's transformative role in sustainability education (*Advancing Sustainability Education Through Art, Expression and Culture*, 2023). This program engages students in learning about local water ecosystems through artistic expressions. Students participate in activities such as creating murals, sculptures, and

installations that depict local aquatic environments. These art projects are combined with field trips, research on water conservation, and interactions with local environmental experts. This holistic approach allows students to develop a deeper emotional connection with their local ecosystems, fostering a sense of responsibility and urgency towards water conservation issues.

Similarly, in Belgium, the "Busleyden Atheneum Pitzemburg" employs an innovative approach to connect students with sustainability and cultural issues through a project-based learning module focused on mining activities in the Democratic Republic of Congo (*Advancing Sustainability Education Through Art, Expression and Culture*, 2023). This module includes research projects, art installations, and collaborations with Congolese artists and activists. Students explore the socio-economic and environmental impacts of mining, culminating in an exhibition of their art projects which depict the complexities of these issues. This approach not only educates students about global sustainability challenges but also empowers them to express their understanding and concerns through creative means.

These international examples highlight how art can be a powerful tool for connecting students to both local and global environmental issues. They showcase the potential of art in providing engaging, emotionally resonant, and contextually rich learning experiences, thereby fostering a more empathetic engagement with sustainability challenges. Drawing from these global practices, the integration of art into sustainability education in China could significantly benefit from adopting similar interdisciplinary and experiential learning models.

Methods

Research Design

In order to answer the overarching question guiding this research, i.e. how do art educators and professionals perceive the role of art in enhancing awareness of the United Nations' 17 Sustainable Development Goals among college students in China, this study employed qualitative methods. Specifically, 12th semi-structured interviews were conducted. This relatively small set of in-depth interviews uncovered both variety and commonalities among interviewees' perspectives as well as insights into their reasoning better than a survey of the views of a larger sample could have. The core objective was to delve into the interpretations and significance that educators and art-related professionals attribute to the use of art in education on THE 17 GOALS. This involved examining their attitudes, insights, as well as their personal and professional experiences with art in an educational setting.

The Study Population

The population for this study was composed of professional educators and art-related professionals who are actively engaged in the conception, design, and execution of artistic exhibitions and initiatives aimed at promoting sustainability awareness in urban Chinese universities. This diverse group included professors, curriculum developers, sustainability coordinators, artists, and art program directors. These professionals were selected for their direct involvement in and contribution to the integration of art in sustainability education, ensuring that the study captured a wide range of perspectives and practices.

The Study Sample

The study employed a combination of snowball sampling and convenience sampling to recruit and select a sample of 12 educators and art-related professionals willing to be interviewed. Snowball sampling allowed for the identification of key informants within the field, while convenience sampling ensured the feasibility and accessibility of participants. This sample size was considered optimal for qualitative studies, striking a balance between comprehensive coverage and manageability for in-depth analysis. By the 9th interview saturation was reached per Grady's (1998) definition regarding interviews, regarding the range of responses received for each questions. The final 3 interviews confirmed and added illustrative examples to that range.

Participants were chosen based on specific criteria:

1. **Involvement in Sustainability Initiatives:** Priority was given to those who had played a significant role in designing, implementing, or evaluating art-based sustainability initiatives within urban Chinese universities.

- 2. **Diverse Disciplinary Backgrounds:** The sample included individuals from a variety of disciplines, such as education, environmental sciences, arts, and more, to ensure a multidimensional understanding of the subject.
- 3. **Diverse Institutions:** Participants were selected from a range of universities to capture diverse institutional approaches to sustainability education.
- 4. **Diverse Professional Experiences:** The study aimed to include professionals at different stages of their careers, from experienced experts to emerging voices in the field, to gain a broad spectrum of insights and experiences.

Confidentiality

Prior to the commencement of the study, selected participants were thoroughly informed about various aspects of the research. This notification process encompassed a detailed explanation of the study's purpose, clearly outlining the objectives and expected outcomes. Participants received comprehensive information on how the study was conducted, including the methodologies used and the nature of their involvement. This briefing also covered the significance of their participation in the broader context of the research and its potential contributions to the field. Participants were also informed about the duration and frequency of these activities, as well as any preparations they might need to undertake beforehand. Clear instructions were provided on how data would be collected (through interviews) and the estimated time commitment for each session. Additionally, the notification emphasized the voluntary nature of their participation, reassuring them that they had the right to withdraw from the study at any point without any adverse consequences. Furthermore, it detailed the measures taken to ensure confidentiality and data protection, reassuring participants about the privacy and security of any information they provided..

Throughout the research process, from the preliminary stages to the final phases of data analysis and reporting, confidentiality and ethical considerations were paramount. All data collected during the course of this study, including interview notes, audio recordings, and transcripts, were handled with the utmost confidentiality. To protect the anonymity of the participants, coding was used during the gathering and processing of this data.

The project was guided by ethical motives, ensuring that the rationale behind the research was rooted in contributing positively to both social and academic knowledge. Additionally, the availability of necessary resources was confirmed to conduct the study effectively and responsibly, ensuring that the research was executed with the utmost care and diligence. A comprehensive literature review was also conducted. This

review was crucial in grounding the study within the existing body of research, thereby ensuring that the research contributed fresh insights and perspectives to the field.

Finally, in the reporting and evaluation of the research findings, principles of transparency, honesty, and respect for both the participants and the broader community were rigorously maintained. This commitment to ethical reporting and evaluation was essential in upholding the integrity of the research and its contributions to the field.

Data Collection

Pre-Interview Preparation: Prior to conducting the interviews, participants received an interview guide via email, which is included in Appendix A. This guide, which outlined the general topics and themes for discussion, served as a preparatory tool. It ensured participants were well-informed about the inquiry areas and discussion nature, fostering an environment conducive to open and reflective responses. This initial briefing, including confidentiality assurance, was crucial for building trust and rapport with participants, setting the stage for open, honest, and reflective dialogue.

Interview Questions: To probe the perspectives of art educators and related professionals, all interviews followed an agenda of semi-structured questions. These questions, detailed in Appendix B, covered the following topics: interpretations of sustainability, personal engagement with art, the role of art as an educational medium, the impact of art on promoting sustainability, and the influence of cultural factors on the promotion of sustainability through art.

Design of Open-ended Questions: Within the interview framework, open-ended questions were strategically designed to encourage detailed and comprehensive responses. These questions aimed to cover a broad spectrum of topics, including the participants' personal experiences, their perceptions, and their professional practices regarding the use of art in sustainability education. The objective was to extract rich, nuanced information that reflects the complexities of integrating art into this educational context.

Online Interview: The interviews were conducted using Zoom, chosen for its widespread accessibility and ease of use. This digital approach offered several advantages, including the ability to connect with participants from diverse geographic locations and the flexibility to schedule interviews at times convenient for all parties. This method also eliminated the logistical challenges of physical meetings, thereby ensuring a smoother and more efficient data collection process.

Language Considerations in Interviews: Acknowledging the linguistic preferences and proficiencies of the participants, the majority of the interviews were conducted in Chinese. This decision was made to create a comfortable environment for the participants, enabling them to express themselves naturally and fully. Conducting the interviews in the participants' native language was essential for capturing the depth, subtlety, and authenticity of their thoughts and experiences.

Recording and Transcription Process: With the explicit consent of the participants, all interviews were audio-recorded. This step was crucial for capturing the data accurately, which is essential for a comprehensive and in-depth analysis at a later stage. After each interview, the recordings were securely stored for the subsequent coding process. This approach ensured a faithful representation of the conversations. In adherence to ethical standards and to protect the confidentiality and privacy of the participants, all recordings were carefully anonymized, with any identifiable personal information being conscientiously removed.

Analysis of the Data

The analysis of data gleaned from interviews and document reviews was conducted using a structured coding and thematic analysis process, ensuring a comprehensive understanding of the findings.

Data Familiarization and Codebook Development: The analysis began with an in-depth familiarization with the data obtained from interviews and document reviews. This involved re-reading the transcribed data to fully grasp the content and context. Building on this comprehensive understanding, a codebook was developed. This codebook contained detailed definitions or guidelines for each code.

Coding Process: The first round of coding involved systematically applying these initial codes to the data. Each segment of the conversations and documents was scrutinized, assigning codes to specific excerpts that encapsulated key concepts or ideas. This iterative process saw the refinement, combination, or subdivision of codes as a deeper understanding of the data unfolded. Following this, the identified codes were aggregated into broader themes. These themes represented significant patterns in the data and were pivotal to understanding the manner in which educators and art professionals perceive and implement art in sustainability education.

Analyzing Themes: Each theme then underwent a thorough analysis to explore its representation in the data and its relation to the research questions. This involved reassessing the coded data and considering

the broader implications of each theme. Subsequently, these themes were contextualized within the broader scope of existing literature, specifically aligning with the study's focus on sustainability education in the Chinese context.

Cultural and Linguistic Sensitivity in Analysis: The analysis was acutely attuned to the linguistic nuances and cultural contexts inherent in the data. This sensitivity was critical in effectively bridging any cultural and linguistic gaps, ensuring that the analysis was reflective of the participants' true perspectives.

Member Checking for Validation: To validate the findings and ensure their authenticity, a member-checking process was employed. This involved presenting the initial findings back to a subset of interview participants for their review and feedback. This participatory approach was instrumental in verifying the accuracy of the analysis and aligning the findings closely with the participants' viewpoints.

Reflexivity: Throughout the data analysis phase, a strong emphasis was placed on practicing reflexivity. The researcher engaged in continuous self-reflection regarding their own background, biases, and perceptions and how these might influence the interpretative process. This critical self-awareness was essential in maintaining an objective stance and being open to multiple interpretations of the data, thus ensuring a balanced and thorough evaluation of the findings.

Findings

This section conveys key findings from semi-structured interviews conducted with a group of 12 art educators and professionals, which included professional artists, curators, teachers, museum staff, and journalists, addressing the role of artistic engagement in enhancing awareness of the United Nations' 17 Sustainable Development Goals (THE 17 GOALS) among Chinese college students. The findings are organized into four sections to guide the reader through different aspects of artistic engagement with sustainability. First, "Curatorial Approaches to Sustainability" examines the methods used by professionals to make sustainability concepts accessible and engaging for Chinese college students through exhibitions. Next, "Everyday Sustainability in Student Life" details how sustainability is being integrated into Chinese college students' daily experiences and lifestyles. The section on "Corporate Partnerships in Sustainability Education" discusses innovative strategies, such as collaborations with corporations like Starbucks, to engage Chinese college students in sustainability. Lastly, "Prospective Strategies for Future Exhibitions" focuses on interviewees' ideas about future approaches, highlighting the need for robust support from governmental and educational institutions and the potential for various innovative strategies in sustainability-focused educational exhibitions tailored for the younger Chinese demographic.

Curatorial Approaches to Sustainability

In exploring curatorial approaches to sustainability-related exhibitions for Chinese college students, insights from five professionals who have directly curated such exhibitions emphasized a "direct" or "straightforward" method in their curatorial practice. They strategically used various mediums—including promotional boards, textual descriptions, images, decorative paintings, and artworks—to make the themes of their exhibitions both accessible and engaging. This method specifically addresses the societal need for a deeper understanding of sustainability concepts, which often only receive superficial recognition. By presenting these concepts in a clear, unambiguous manner, these curators aim to demystify sustainability for the general public, making it more relatable and comprehensible for students. It reflects an understanding that art and exhibitions can serve as powerful tools for social education, translating abstract concepts into tangible experiences that resonate with students. Additionally, the term "immersive" appeared a total of seven times in their responses, highlighting a common value placed on deeply engaging art experiences. Further inquiry into the use of "immersive" by those who mentioned it revealed a shared understanding among three professionals. They elaborated that art serves as an effective medium for education, engaging students in a manner that facilitates learning in an unobtrusive, enveloping way. This insight underscores art's capacity not only to captivate but also to educate, offering students the

opportunity to absorb knowledge and experience through engagement that transcends traditional boundaries.

In detailing the involvement of professionals in sustainability-related exhibitions for Chinese college students, five professionals shared that their curatorial work was inspired not directly by the overarching concepts of "sustainability" or "THE 17 GOALS" but by individual goals within this framework. For instance, one artist emphasized the dangers of littering and the importance of waste segregation under the theme of "Goal 13: Climate Action." A notable example was described by a professional who serves as both an artist and high-ranking academic leader at a local university in a city in eastern China, known for its blend of rich historical heritage and rapid modern development. Between 2017 and 2018, he organized city-wide exhibitions twice that drew participation from a wide spectrum of society in this city, including students and teachers from various universities. The exhibitions focused on collecting everyday waste items from participants to foster discussions on environmental pollution and sustainable development. This artist-academic shared an insight into the dual nature of waste materials, arguing that beyond their initial unappealing aspect lies an inherent charm. This charm, he suggests, is emblematic of waste's potential for recycling and sustainable development. According to him, waste items do not solely represent refuse or materials to be discarded; instead, they embody opportunities for creative reuse and serve as a resource for sustainable practices. This perspective shifts the narrative from waste as a problem to waste as a potential solution, emphasizing the importance of reevaluating our relationship with materials often considered worthless. Through this lens, the artist-academic advocates for a broader understanding and appreciation of waste's role in promoting circular economic models and sustainable environmental practices. Inspired by items considered waste in classrooms, he and his students created various artworks, such as 3,000 origami cranes assembled from used papers and drafts. Throughout the exhibition's preparation and display, efforts were made to adhere to low-carbon practices, including minimizing the use of printed materials and optimizing the spatial layout of the exhibitions to effectively convey their message. He noted a significant increase in participation over the years, with over 70 contributions from various students in 2017 and more than 200 in 2018, highlighting the growing engagement of the Chinese college student community with sustainability. Among the memorable submissions was a student's art installation made from crab shells and floral debris, demonstrating innovative reuse and artistic interpretation of waste materials. The artist-academic noted that students expressed a heightened awareness and concern for social issues through anonymous feedback and discussions after the exhibitions. He attributed the significant shift in their understanding and ideological stance on sustainable development to their active involvement in these exhibitions.



Figure 1-4: Innovative Art from Recycled Materials

These images showcase a series of artworks created from recycled materials, exhibited during the 2017 and 2018 Green Exhibitions curated by artist-academic and his students. From plastic bottles to old newspapers and a repurposed television, each installation embodies a practical application of recycling, turning discarded items into thought-provoking and environmentally-conscious art.

Everyday Sustainability in Student Life

When asked about opportunities to increase Chinese college student engagement with sustainability through art, three professionals concurred that real-life experiences form the foundation for both artistic expression and sustainability consciousness, beyond broad strategies. One such instance involves a creative approach to everyday objects that could easily be overlooked or discarded. One of the professionals, who is both a university professor and an event curator, shared a personal anecdote that illustrates this point beautifully. In his household, numerous incomplete sets of playing cards, worn or missing one or two cards, would typically be considered for disposal. However, as someone deeply invested in sustainability, he favored repurposing over discarding. This led to the transformation of these

playing cards into unique pieces of art, with new designs painted onto the card faces. Leveraging his role as an educator, he extended this concept of creative reuse into his classroom, engaging students in the project of reimagining playing cards. This collaborative effort culminated in an exhibition last year, showcasing the reinterpreted playing cards as artworks. This initiative not only demonstrated the practical application of sustainability concepts but also highlighted the role of art as a medium for fostering a deeper understanding and appreciation of sustainability among students. By drawing on everyday items that would otherwise contribute to waste, the project encouraged students to see potential in the mundane, fostering a mindset aligned with the principles of sustainability and creativity.



Figure 5-8: Repurposed Playing Cards Artwork

These images display an array of creatively repurposed playing cards, transformed into artworks by students under the guidance of a university professor and event curator. Each card, originally part of incomplete sets and destined for disposal, now bears original designs, infusing new life and meaning into what was once considered waste. These unique pieces exemplify the intersection of art, sustainability, and education by encouraging students to see the artistic potential in everyday objects and to adopt a sustainable mindset.

Corporate Partnerships in Sustainability Education

Seeing how real-life applications, such as the repurposing of playing cards, effectively deepen student engagement with sustainability, prompts consideration of how these approaches can be magnified on a larger scale. One professional noted that the younger generation's acceptance is always influenced by the broader social context in China, and using a tie-in that resonates with a younger audience is an effective strategy. Exploring the use of corporate partnerships to extend the reach of sustainability education reveals how leveraging widely-recognized brands can serve as a powerful tool to captivate and educate students, bridging the gap between individual initiatives and broader societal engagement. For example, one professional curator ventured beyond traditional self-organized or group-curated exhibitions to partner with the corporate sector. This strategy was exemplified through a successful collaboration with Starbucks in Eastern China. Utilizing social media platforms such as Weibo for outreach, the curator connected with Starbucks and initiated a project to repurpose 10,000 discarded Starbucks cups. These cups were ingeniously transformed into a curved wall installation within Starbucks stores, serving as a medium to draw the attention of Starbucks' clientele, especially younger generations, to the exhibition. The collaboration aimed to harness Starbucks' brand influence to engage a broader younger audience, and by situating the exhibition within the familiar setting of Starbucks stores and integrating it into the usual environment of younger customers, the initiative effectively promoted sustainability awareness among a demographic that might not typically frequent art exhibitions. The strategic use of Starbucks' customer base and the creative repurposing of waste materials underscored the exhibition's dual goals: to foster greater societal engagement with sustainability issues and to demonstrate the potential for corporate partnerships in amplifying the message of environmental stewardship.

Prospective Strategies for Future Exhibition

Despite creative efforts ranging from individual artistic projects like repurposing playing cards to broader corporate collaborations, there remained a marked reluctance among Chinese college students to fully engage with sustainability exhibitions, as highlighted by two interviewees. Delving into the reasons behind this, professionals noted that international attention towards sustainability significantly surpasses local interest, indicating a gap in awareness and support within Chinese local educational institutions and governments that can facilitate education for younger audiences. One curator shared a notable experience when an assistant to a senior official from an international organization visited their exhibition on International Earth Day, signifying international recognition. Yet, local government support was limited to verbal endorsement, lacking financial or substantial backing. Discussing aspirations for future sustainability-related exhibitions, a consensus emerged among ten professionals. They stressed the need

for more robust support from both local and national government agencies. They acknowledged that understanding the interconnectedness of local actions and global impacts is essential for enhancing the effectiveness and reach of exhibitions dedicated to promoting sustainable development.

Beyond seeking support from government agencies and for-profit companies, interviewees articulated several innovative strategies for the future of sustainability-focused educational exhibitions tailored for the younger Chinese demographic. Two respondents emphasized the concept of "serendipity" in curation, proposing an environment free from material and form restrictions to spur artistic creativity and innovation. They championed the concept of art without boundaries, enabling every student to delve into immersive and spontaneous creation without physical and mental constraints. Meanwhile, three interviewees highlighted the role of sustainability as a "current topic" of significant societal relevance. They noted the increasing interest and engagement among students in China. Thus, they stressed the critical importance of cultivating an ambience within the exhibition space. Although their opinions varied regarding implementation, a consensus emerged around adopting a direct approach that conscientiously manages costs and minimizes exhibition material waste, thus upholding the core principles of sustainability. They argue for an aesthetic of simplicity and accessibility, eschewing the trappings of extravagance in favor of a space that encourages reflection and connection, adorned with only the most essential soft furnishings. They advocated for integrating sustainability into students' everyday living, promoting it as a "new lifestyle" paradigm.

Furthermore, seven interviewees recognized the transformative power of "new media and digitalization" in propelling sustainability exhibitions into a new era—one marked by technological integration and interactive visitor experiences. These professionals noted the imperative of cross-disciplinary collaboration, blending diverse expertise to forge a digitally transformative experience that remains anchored in sustainable practices. Finally, while one individual accentuated the rising tide of "new values" within the sustainability dialogue, underscoring the potent role of narrative in reconnecting audiences with sustainability themes, another stressed the indispensable need for "diversity and breadth" in representation. This includes showcasing the extensive impact of sustainability on all life aspects, from music to visual arts, thus underlining its all-encompassing significance.

The findings from the semi-structured interviews with the 12 professionals in this study reveal the role of art in making sustainability concepts accessible and engaging through various curatorial approaches and innovative partnerships for Chinese college students. Art is shown to serve not only as a medium of expression but also as an influential educational tool that brings sustainability issues closer to the daily

lives and experiences of students. These professionals' diverse strategies—from immersive exhibitions to everyday sustainability practices—illustrate a comprehensive approach to embedding sustainable values in education. These efforts are underpinned by the interviewees' shared belief in art's power to transform perceptions and foster a deeper understanding of sustainability. Looking forward, the findings underscore the need for continued support and innovative strategies to maintain momentum in sustainability education. This is critical in nurturing a generation of students who are not only aware of but are also actively engaged in addressing global sustainability challenges.

Discussion

Reflecting on the insights gleaned from the interviews presented in the findings section of this research paper, it is clear that the transformation of sustainability concepts into exhibits that are visually and creatively compelling is crucial for bridging the gap between the abstract objectives of the United Nations' 17 Sustainable Development Goals (THE 17 GOALS) and the tangible comprehension of students. This is particularly relevant within the Chinese educational system, which has been traditionally marked by an emphasis on rote learning. The integration of art signals a refreshing shift toward more engaging and immersive learning experiences. As underscored by the narratives of educators, this integration signifies not merely a methodological shift but also represents a paradigmatic transition towards learning experiences that are both immersive and engaging. These experiences have the potential to foster critical thinking, emotional engagement, and deep contemplation of complex global issues like sustainability.

The findings of this study echo and contribute to the contemporary scholarly dialogue advocating for multi-disciplinary educational methods, particularly within the context of China. The arts are increasingly esteemed for their capacity to cultivate comprehensive thinkers, equipped to comprehend and confront the diverse nature of global challenges. Positioning insights from this study alongside the expansive landscape of prior studies, it becomes apparent that while the educative power of art is recognized in theory, this research provides tangible exemplifications of this potential actualized in educational settings. This finding beckons for an integration of creative methodologies into the curriculum, intending to heighten student engagement and sensitivity towards the discourse of sustainability.

An unexpected result from the findings is that the support structures for sustainability education in China have revealed a significant gap between the enthusiastic international promotion of these initiatives and the more tepid response from local governments within China. Despite China's commitment alongside the UN to work within the United Nations Sustainable Development Cooperation Framework, aiming to respond to the country's post-2020 development landscape challenges, including sustainability education, there is a mismatch between the international accolades for sustainability efforts and the material support — funding, infrastructure, policy implementation — provided on a local level. Specifically, according to the article The Reception of Education for Sustainable Development (ESD) in China: A Historical Review, the discrepancy, where the heavy focus on "Ecological Civilization" in Chinese policy and action-making may contribute to these challenges by prioritizing environmental aspects at the expense of other dimensions of sustainability (Zhou & Lee, 2022). It fails to engage students deeply with

comprehensive interdisciplinary aspects of sustainability, which including economic viability, social justice, environmental integrity, and cultural diversity (Zhou & Lee, 2022). This focus on a narrow interpretation of sustainability directly impacts educational practices at the classroom level, as indicated by findings from interviews.

A participant in the study indicated that the pressure on teachers to adhere to standardized curricula, heavily influenced by centralized policy directives, further constrains their ability to introduce comprehensive and innovative teaching methods. This systemic rigidity stifles educational innovation. The lack of support for pedagogical flexibility and insufficient resources to implement diverse teaching strategies lead to a curriculum that inadequately challenges Chinese college students' deep understanding of complex sustainability issues, failing to comprehensively address the intertwined social, economic, and environmental dimensions of these issues. Furthermore, this educational shortfall was exacerbated when sustainability topics were integrated as a subsection into broader subject areas, where they risked becoming diluted and losing their impact amidst competing educational priorities.

Thus, the contrast between the strong global advocacy for these initiatives and the tepid local engagement from China's governments highlights the need for strategies that not only encourage local authorities to translate their verbal support into tangible actions but also enhance the effectiveness of sustainability education. There is a significant opportunity to align China's national initiatives with the vigorous international drive towards these educational goals. Such strategic alignment is imperative to amplify the impact of sustainability education, thereby paving the way for a sustainable and enduring future.

Conclusion

This study delved into the perspectives of art professionals on the role of art in raising awareness of the United Nations' 17 Sustainable Development Goals (THE 17 GOALS) among Chinese college students. The insights obtained reveal the potency of art as a conduit for sustainability education, indicating that practical engagement with art can markedly enhance students' understanding and awareness.

This study faced several limitations that are important to acknowledge for a comprehensive understanding of the research context. The scope was confined to a selection of professionals in urban Chinese universities, which limits the generalizability of the findings across China's diverse educational settings. The metropolitan focus may overlook rural or less economically developed regions where educational resources and access to art may differ. In addition, the reliance on professional observations rather than empirical data from students presents a subjective lens, potentially biasing the study's conclusions. With more resources, future research could incorporate methods such as surveys or experiments with Chinese college students, providing a broader, more nuanced perspective that encompasses the varied student voices and their personal encounters with sustainability education through art.

Looking ahead, there's a fertile ground for future studies to build on the foundational work presented here. Potential research avenues might examine the long-term impact of art-based sustainability education on student behaviors and attitudes beyond the academic realm, exploring how such education influences their lifestyle choices and civic engagement. Another promising direction would be a comparative study of sustainability education across different cultural and socio-economic contexts within China, examining how local customs and practices can shape the implementation and reception of such educational initiatives.

In conclusion, this thesis reaffirms the significant role of art in sustainability education, championing the need for innovative, experience-driven educational strategies. The use of art in teaching sustainability is more than an academic exercise; it represents a vital approach to instilling environmental consciousness and fostering a generation that is both informed and proactive about sustainability issues. Art can act as a springboard for further research and action, catalyzing advancements in sustainability education that are both culturally resonant and pedagogically effective. The insights from this study contribute to the growing body of literature on sustainable development education and serve as a call to action for educators, policymakers, and stakeholders to deepen their commitment to this crucial educational endeavor.

Disclosure Statement

No potential conflict of interest was reported by the author.

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Appendix A

Subject: Research Invitation: Exploring the Role of Art and Education in Achieving Sustainable Development Goals

Dear XXX,

I hope this email finds you well.

My name is Xiaofeng Zhu, and I am currently a senior student at the University of Washington, majoring in communication. I am reaching out to invite you to participate in a research study I am conducting as part of my Undergraduate Honors Program.

In 2015, the United Nations has established 17 Sustainable Development Goals, aiming to address global challenges, including "Zero Hunger," "Quality Education," and "Climate Action." This year, my research focuses on exploring how educational institutions and artists in China are engaging students with these goals through artistic expressions. I am interested in understanding your perspectives and experiences related to this topic. Your insights would be incredibly valuable to my study and could contribute significantly to our understanding of this important area.



* Please note that your participation in this interview is entirely voluntary. I assure you that all responses will be anonymized in our study, ensuring that your identity is not linked to any collected data or findings. Should you have any questions or concerns about the interview process, the use of the information, or any other aspect of the study, please do not hesitate to contact me.

The interview will be approximately 45 mins to 1 hour long. To give you a better idea of what to expect, some sample questions are listed below for your convenience:

- *Q1:* Could you explain your interpretation of "sustainability"?
- Q2: In your opinion, is art an effective medium for educating the public about sustainability?
- Q3: Are there any art exhibitions or projects focusing on sustainability that you've attended or heard about? What was your reaction to them?
- Q4: How do you tailor art-based sustainability education to resonate with college students?
- Q5: How do you measure or observe the influence of artistic engagements on students' sustainability practices or mindsets?

If you are interested in participating or wish to discuss this further, please let me know at your convenience before February 10th. I am flexible and can adjust to a time that best suits you for the interview.

Thank you for considering this invitation.

Appendix B

Interview Questions:

Part 1: interpretations of Sustainability

- Could you explain your interpretation of "sustainability"?
 - Follow-up: Which sustainability issues do you perceive as most pressing in your community or within the broader Chinese context?

Part 2: Personal Engagement with Art

• How frequently and in what forms do you engage with art in your daily life?

Part 3: Art as an Educational Medium

- In your opinion, is art an effective medium for educating the public about sustainability?
- Are there any art exhibitions or projects focusing on sustainability that you've attended or heard about? What was your reaction to them?
- How do you tailor art-based sustainability education to resonate with college students?
 - Follow-up: Can you share examples of art projects or initiatives that successfully engaged students with sustainability topics?

Part 4: Impact Assessment

- How do you measure or observe the influence of artistic engagements on students' sustainability practices or mindsets?
- Are there particular art forms or mediums you would recommend as particularly effective in engaging students with sustainability?
- What challenges do professionals face when using art to promote sustainability awareness in an educational setting?
 - Follow-up: What opportunities do you see for enhancing student engagement with sustainability through art in the future?

Part 5: Cultural Insights

- In your experience, how do cultural factors in China affect the promotion of sustainability through art among students?
 - Follow-up: Based on your experience, what advices would you offer to educational institutions seeking to incorporate art into sustainability education for college students?