



Integrating Chinese Ink Painting into Visual Communication Education: Fostering Creativity, Aesthetic Sensibilities, and Visual Communication Skills among Students

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ABSTRACT

This study delves into the incorporation of Chinese ink drawing within visual communication education, evaluating its impact on students' creativity, aesthetic discernment, and visual communication proficiencies. Conducting a comprehensive literature review, we employed the PRISMA methodology to sift through pertinent articles. Analyzing 167 publications between 2019 and 2023 using the TCCM (Theory-Context-Method-Findings) framework revealed insights regarding Chinese ink painting's integration into art and design education. Results affirm that employing Chinese ink techniques nurtures creativity, facilitating original idea generation and aesthetic expressions. Exposure to this art form also deepens students' grasp of aesthetic principles like balance and simplicity in their work. However, the focus on short-term outcomes prompts the necessity for longitudinal research to grasp the prolonged impacts. Understanding its influence on visual communication in the digital age remains crucial, highlighting the need for further investigation. In summary, this study provides a concise yet comprehensive overview, discussing background, objectives, analytical methodology, parameters, and key findings. While the integration of Chinese ink drawing exhibits promise in enhancing creativity and aesthetic sensibilities, comprehensive exploration and consideration of long-term impacts in the digital era are warranted. This study advocates for increased scholarly attention, foreseeing potential enhancements in visual communication education curricula.

Keywords: Visual Communication Education, Chinese Ink Painting, Creativity, Aesthetic Sensibilities, Students Visual Communication Skills.

INTRODUCTION

The incorporation of Chinese ink painting into visual communication education is gaining popularity as a pedagogical approach aimed at fostering creativity, developing aesthetic sensibilities, and improving visual communication skills among students (Gardner, 2021; Saunders, 2021). Artwork is often described as visual communication as it effectively communicates messages, ideas, and emotions through visual elements, transcending language barriers (Zhang, Miao, Zhang & Yu, 2020). Chinese painting's distinctive features include brush and ink techniques, focusing on capturing the essence of subjects and promoting harmony and balance (Trinidad, Raz & Magsalin, 2021). Integrating Chinese ink painting into Visual Communication education enhances creativity and aesthetic sensibility while encouraging students to explore novel forms of expression

(Sung, 2022). Educational institutions play a crucial role in designing comprehensive curricula and fostering an environment that nurtures creativity and critical thinking (Gardner, 2021; Saunders, 2021). Teachers serve as mentors, guiding students in mastering techniques and providing constructive feedback for their growth. Balancing cultural influence is vital for the continued relevance of Chinese Ink Painting in the context of Visual Communication education (Bao & Bao, 2023).

The term "visual communication" aptly describes an artwork's capacity to convey complex ideas, emotions, and stories through visual elements (Sung, 2022). Chinese painting, characterized by brush and ink techniques, emphasizes capturing the essence of subjects and achieving harmony and balance (Gardner, 2021; Saunders, 2021). Integrating Chinese ink painting into Visual Communication education nurtures students' creativity and aesthetic sensibility, pushing them to experiment with unique forms of expression (Bao & Bao, 2023). Educational institutions play a pivotal role in this process, designing comprehensive curricula and fostering an environment that encourages imaginative thinking. Teachers, in their role as mentors, provide guidance and constructive feedback, supporting students' artistic growth (Trinidad et al., 2021). To sustain Chinese Ink Painting's cultural significance, it is essential to strike a balance between preserving tradition and embracing contemporary influences within the Visual Communication education landscape. This study aims to investigate the possible benefits and consequences of adding Chinese ink painting into art and design education, with a particular emphasis on the impact on student learning outcomes and artistic development.

Previous research in this area has looked into various aspects of incorporating Chinese ink drawing into art education (Bao & Bao, 2023). Lee, Lin, Hwang, Fu and Tseng (2021), for example, conducted a study on the benefits of Chinese ink drawing on students' creative thinking abilities. Students were encouraged to engage with Chinese ink painting methods and principles through a series of seminars and artistic exercises (Chien, 2022). Their research found that students who engaged in Chinese ink painting activities improved significantly in divergent thinking and inventiveness (Gu, Ritter & Dijksterhuis, 2023). This shows that exposure to Chinese ink painting boosts pupils' ability to produce original ideas and aesthetic expressions (Zhang et al., 2020). Sui (2019) investigated the effect of Chinese ink drawing on students' aesthetic sensibility in another study. Students were introduced to the techniques, materials, and cultural relevance of Chinese ink painting through a series of workshops led by the researchers (Sun, 2022). Students gained a deeper understanding of the principles of balance, harmony, and simplicity inherent in Chinese ink painting via hands-on experience and critical thought (Ji, 2022). The results showed that student's comprehension and application of aesthetic concepts in their artistic endeavors improved after being exposed to Chinese ink painting (Kan, 2021).

Several gaps remain in the growing corpus of research on incorporating Chinese ink drawing into art education (Bao & Bao, 2023; Zhang & bin Mohamad Haris, 2022). To begin with, the majority of available research has generally focused on short-term outcomes, providing little insight into the long-term impacts of this pedagogical strategy (Angrist et al., 2021; Greenhow, Galvin, Brandon & Askari, 2020). To inform educational practices and curriculum development, it is critical to evaluate the durability and sustainability of the benefits associated with Chinese ink painting integration (Zhu & Zhu, 2022). Longitudinal studies that follow students' progress and artistic development over time might provide useful insights into the long-term effects of incorporating Chinese ink painting into visual communication instruction (Fiorella, 2020). Second, although Chinese ink drawing has been examined for its benefits on creativity and aesthetics, its effects on students' visual communication abilities require additional study (Dong, Zhu & Li, 2021). Digital communication requires visuals (Kędra & Źakeviči ūtė, 2019). Investigating how incorporating Chinese ink drawing improves students' visual communication abilities would provide useful insights into the broader influence of this teaching technique (Trinidad et al., 2021). It would be useful to examine how students' exposure to Chinese ink painting techniques and principles affects their capacity to transmit ideas, emotions, and narratives successfully through visual mediums (Sung, 2022).

To summarize existing research, identify knowledge gaps, and lay the framework for future study, a complete literature review is needed. A systematic review of the literature provides a comprehensive summary of the topic's existing understanding in this research. The synthesis of existing research will allow for a more thorough knowledge of the theoretical frameworks, methodology, and findings associated with incorporating Chinese ink painting into visual communication instruction.

Finally, this introduction underlines the importance of incorporating Chinese ink drawing into visual communication instruction and identifies gaps in the current body of research. This research aims to contribute to the field by providing a comprehensive understanding of the potential benefits and implications of incorporating Chinese ink painting into art and design education by examining previous studies and their findings, identifying gaps, and justifying the need for a literature review.

LITERATURE REVIEW

Visual communication education is critical in developing students' creative and artistic abilities, helping them to successfully communicate messages and ideas through visual mediums (Pavlou, 2020). As the world grows more interconnected, it is critical for educators to investigate and include other aesthetic traditions in the curriculum (Pipponen & Karlsson, 2021). Chinese ink painting is one such rich heritage that has enormous potential for improving visual communication education (Gongkai & Qing, 2019). Students can benefit from the unique aesthetic and cultural views offered by Chinese ink painting by incorporating it into the curriculum, widening their creative horizons and fostering a deeper grasp of visual communication (Sukornyk & Smale, 2020).

Cultural Importance and Aesthetic Values of Chinese Ink Painting

Chinese ink painting is strongly ingrained in Chinese culture and has a thousand-year history (Xu & Stahl, 2023). It embodies Taoist and Zen Buddhist philosophy, emphasizing harmony, balance, and expressing the spirit of nature (Wang, 2022). The expressive brushwork, sparse compositions, and emphasis on negative space of Chinese ink painting create a distinct visual language that conveys a sense of tranquility and poetic beauty (Zhang, 2021).

Advantages of Including Chinese Ink Painting in Visual Communication Education

Cultivating Aesthetic Sensibilities

Chinese ink painting teaches pupils to observe and enjoy nature, improving observational skills and fostering an awareness of the interaction of light, form, and texture (Sharma & Kumar, 2023). This increased aesthetic sensibility can considerably improve pupils' ability to generate visually appealing designs and compositions (Ceran, 2022).

Students can receive exposure to a distinct artistic medium beyond digital tools and traditional paintbrushes by combining Chinese ink painting techniques (Kaimal et al., 2020). The use of Chinese ink, brushes, and rice paper exposes children to new materials and techniques, inspiring creativity and providing hands-on learning opportunities (Lv, 2023).

Embracing Cultural Variety

Incorporating Chinese ink drawing into the curriculum allows for the celebration of cultural diversity and the promotion of cross-cultural understanding (Chang, 2022). Students can learn about the historical and cultural context of Chinese ink painting, as well as its influence on current visual arts (Shiau, 2020). This exposure to many cultural ideas fosters empathy, tolerance, and a global perspective (Lähdesmäki & Koistinen, 2021).

Improving Visual Storytelling Abilities

Through symbolic imagery and compositional techniques, Chinese ink painting frequently conveys narratives and emotions (Woon, Patron & Boo, 2022). Students can strengthen their visual storytelling abilities by studying and practicing this art form, learning to communicate complex thoughts and emotions through visual means (Kim & Li, 2021). This expertise is extremely useful in industries such as advertising, graphic design, and multimedia production (Megri, Hamoush, Megri & Yu, 2021).

Encouraging Mindfulness and Concentration

Chinese ink painting takes patience, concentration, and a meditative approach (Oh, 2022). Students who participate in this artistic activity learn to slow down, pay attention to details, and cultivate mindfulness (Huerta, Carberry, Pipe & McKenna, 2021). These characteristics can be transferred to other areas of visual communication, developing disciplined work habits and improving the quality of their creative output (Prochner & Godin, 2022).

Strategies for Implementation

Educators can use the following ways to effectively incorporate Chinese ink drawing into Visual Communication Education

Integrate dedicated modules or classes on Chinese ink painting techniques, history, and aesthetics into the curriculum (Li, 2020). Include hands-on exercises and tasks that inspire students to investigate the medium and apply its concepts to their visual communication projects (Malik & Zhu, 2023).

Collaborative Projects

Encourage cooperation between practitioners of Chinese ink painting and students of visual communication (Sung, 2022). This multidisciplinary approach can give students with unique opportunity to learn from experts, gain hands-on experience, and explore novel methods to combine classic ink painting techniques with

contemporary visual communication practices (Okada, Agata, Ishiguro & Nakano, 2020).

Organize exhibitions and workshops demonstrating Chinese ink painting alongside students' visual communication initiatives (Dong et al., 2021). This not only emphasizes the art form's integration but also stimulates public participation and enjoyment of Chinese ink painting in the larger community (Wenying & Hengtong, 2022).

Contextualization and Research

Encourage students to conduct studies on the historical and cultural context of Chinese ink painting (Bachiri & Sahli, 2020). This broadens their awareness of the art form and allows them to evaluate its influence on contemporary visual communication (Caldwell, Whewell & Heaton, 2020). This type of study can be used in academic papers, presentations, or multimedia initiatives (Alpizar, Adesope & Wong, 2020).

Integrating Chinese ink painting into visual communication education provides an exciting chance for students to broaden their artistic horizons, increase cultural understanding, and strengthen their visual communication skills (Shiau, 2020; Sutimin & Musadad, 2023). Educators can create a more holistic and culturally varied learning environment by embracing the distinctive aesthetic and philosophical ideas of Chinese ink drawing, providing students with the tools to flourish in their future creative efforts (Li, 2020; Liu & Cui, 2023). In an increasingly interconnected world, incorporating Chinese ink drawing not only improves visual communication education but also encourages cross-cultural discourse and appreciation (Louhapensang & Noobanjong, 2021).

Theory

Through diverse theoretical frameworks, Chinese ink painting can be integrated into visual communication education to enhance creativity, aesthetic sensibility, and visual communication skills (Ji & Lin, 2022; Jiang & Wu, 2023). These theories illuminate cognitive, aesthetic, and cultural elements of art education (Fleming, 2023). Educators can explore the effects of Chinese ink painting in visual communication instruction by investigating these theories (Li, Fang & Jiang, 2022). These theories explain and analyze this integration:

Constructivism

This learning theory holds that people actively construct information and meaning from their experiences (Garzón, Baldiris, Gutiérrez & Pavón, 2020). Constructivism emphasizes hands-on, experiential learning in Chinese ink painting and visual communication education (Ng & Tsang, 2021). Students create Chinese ink paintings, reflect on their experiences, and connect their art to visual communication (Wardaki, 2021). This approach highlights how personal investigation and reflection enhance creativity and aesthetic sensibility (Cheng, 2019).

Aesthetics

Aesthetic theories explain beauty, art, and art appraisal (Evangelinos & Tsharaktschiew, 2021). Chinese ink painting can be integrated into visual communication instruction using formalism, expressionism, and phenomenology (Carr, 2022). Chinese ink painting formalism emphasizes composition, brushwork, and equilibrium (Zhou & Zhou, 2020). Expressionism allows pupils to explore their subjective and creative works (Chumak, 2021). Phenomenology examines how students see Chinese ink painting and how it impacts their visual communication (Wang, Pang, Zhou, Ma & Wang, 2021).

Cultural Studies

Cultural studies theories highlight how social and cultural settings influence art (Liu & Song, 2023). Cultural studies can illuminate the historical, philosophical, and social aspects of Chinese ink painting in visual communication instruction (Fang, Sun, Tong & Kang, 2023). Cultural relativism and postcolonialism urge critical investigation of power dynamics and cultural interchange in this integration (Azeez, 2019). Cultural studies show how Chinese ink painting improves cultural awareness, challenges dominant narratives, and promotes cross-cultural communication (Hoshino, 2023).

Visual Communication Theories

Chinese ink painting helps improve pupils' visual communication skills (Shiau, 2020). Semiotics, gestalt concepts, and visual rhetoric can be used to study how Chinese ink painting affects visual communication (Li, 2019). Students study Chinese ink painting's symbolic language through semiotics (Qi, Fauzi & Yahaya, 2023). Gestalt principles help students develop visual communication by focusing on how humans perceive and organize visual information (Al-krawyi & Shaabeth, 2023). Visual rhetoric teaches students to use Chinese ink painting to construct persuasive visual communication projects (Hua, Hu & Liu, 2021).

These theoretical frameworks help educators understand Chinese ink painting in visual communication

education (Xu & Stahl, 2023). These theories help us understand how this integration encourages creativity, aesthetic appreciation, and visual communication skills in kids (Xu & Stahl, 2023). Using a multidimensional theoretical approach, educators can better understand and assess the impact of integrating Chinese ink painting into visual communication education (Aleven et al., 2023), leading to more informed pedagogical practices and a greater appreciation for visual communication's cultural and artistic aspects (**Table 1**).

Table 1. Theories Usage

Theory	Key Concepts
Cognitive Flexibility Theory	Chinese ink painting enhances cognitive flexibility by encouraging students to explore multiple perspectives (Ng, Shi & Ting, 2020).
	It promotes adaptability and the ability to switch between different modes of thinking and problem-solving (Khasawneh, 2021).
	Students develop a greater capacity to generate creative solutions and think outside traditional boundaries (Sun, Wang & Wegerif, 2019).
Socio-Cultural Theory	Chinese ink painting is embedded in cultural and social contexts, influencing students' artistic development (Luo & Guan, 2023).
	It emphasizes the importance of social interaction, collaboration, and cultural understanding in art creation (Glăveanu, 2020).
	Students learn through observation, imitation, and participation in the art form within their cultural milieu (Taylor & Leung, 2020).
Flow Theory	Integration of Chinese ink painting provides opportunities for students to experience a state of flow (Tai, Hong, Tsai, Lin & Hung, 2022).
	It offers challenges and opportunities for skill-building that match students' abilities and interests (Kennedy & Pek, 2023).
	Students experience heightened focus, enjoyment, and a sense of accomplishment during artistic engagement (Goh & Yang, 2021).
Constructivism	Chinese ink painting supports constructivist learning by allowing students to actively construct knowledge (Ng & Tsang, 2021).
	Students engage in hands-on exploration, reflection, and meaning-making through their artistic experiences (Ng & Tsang, 2021).
	It promotes personal and unique interpretations, encouraging students to construct their own artistic identities (Armstrong, 2019).

Context of Chinese Ink Painting in Visual Communication Education

The concept of incorporating Chinese ink painting into visual communication education, with a focus on cultivating students' creativity, aesthetic sensitivities, and visual communication skills, has been examined in a variety of contexts (Wang, 2023). These studies were conducted in academic institutions, art schools, and cultural organizations with the common goal of investigating the possible benefits and effects of introducing this historic art form into contemporary visual communication teaching (Van den Beemt et al., 2020). The following literature provides insights into the situations in which this idea has been explored, as well as the conclusions that have been reached:

Academic Institutions

Many academic institutions have recognized the importance of incorporating Chinese ink painting into visual communication instruction and have conducted research and created programs in this field (Ramirez, Brush, Raisch, Bailey & Jones, 2021). These educational institutions have investigated the pedagogical practices, curriculum development, and learning outcomes connected with this integration (Solikhah & Budiharso, 2019). Academic studies have looked into the efficiency of adding Chinese ink painting techniques and principles into existing visual communication courses, as well as the establishment of dedicated courses or modules that focus especially on this integration (Campbell & Farrell, 2020). Student questionnaires, assessments, and qualitative evaluations have frequently been used in this research to examine the impact on students' creativity, aesthetic sensibility, and visual communication skills (Concina, 2023).

Workshops and Art Schools

Art schools and cultural groups have been instrumental in promoting the incorporation of Chinese ink

painting into visual communication instruction (Psoma & Skordoulis, 2022). Workshops, residencies, and specialized programs are frequently offered by these organizations so that students and professionals can immerse themselves in the discipline of Chinese ink painting and investigate its application in visual communication (Reynolds & Yu, 2021). Art schools and workshops provide a fertile ground for experimentation, collaboration, and critical examination of the integration process (Dieck-Assad, Ávila-Ortega & González Peña, 2021). Case studies and ethnographic research have been undertaken within these contexts to chronicle participant experiences, examine learning processes, and assess the development of creativity, aesthetic sensibility, and visual communication abilities (Victorino, Bandeira, Painho, Henriques & Coelho, 2022).

Cross-Cultural and Interdisciplinary Collaborations

There have been cross-cultural and interdisciplinary collaborations in the study of incorporating Chinese ink drawing into visual communication education (Victorino et al., 2022). Researchers from various cultural origins, creative disciplines, and educational backgrounds have collaborated to look into the potential synergies between Chinese ink painting and visual communication (Ji & Lin, 2022). Chinese and international artists, academics, and researchers often collaborate. Cross-cultural and transdisciplinary encounters foster learning, information exchange, and fresh perspectives (Oleksiyenko et al., 2021). Cultural interaction, creative conversation, and the impact of varied perspectives on students' creativity, aesthetic sensibility, and visual communication skills are all investigated in these collaborations (Tang, Mao, Naumann & Xing, 2022).

Integrating Chinese ink painting into visual communication instruction has also been examined in the contexts of community participation and exhibits (Shiau, 2020). Researchers and educators have created community-based programs in which students create Chinese ink paintings that are then used in visual communication campaigns addressing local issues, cultural heritage, or social awareness (Villanueva, 2022). These projects seek to increase community participation, cross-generational discourse, and respect for Chinese ink painting as a cultural and artistic tradition (Vue, 2021). Studies undertaken in the contexts of community involvement and exhibitions investigate the transformative potential of incorporating Chinese ink painting into visual communication education, not only for students but also for the larger community (Vue, 2021).

In conclusion, the concept of incorporating Chinese ink painting into visual communication education has been researched in numerous contexts, with an emphasis on cultivating creativity, aesthetic sensibility, and visual communication abilities among students (Li, 2020; Vue, 2021). Academic institutions, art schools, cross-cultural collaborations, and community involvement projects have all contributed to this integration's inquiry and development (Prestridge, Utami & Main, 2021). These settings shed light on the educational techniques, learning results, and transformative potential of adding Chinese ink drawing into visual communication instruction (Yuan, Li, Peng & Qiu, 2022). The outcomes (Yuan et al., 2022) of this research help to shape successful tactics, curriculum design, and pedagogical practices that foster students' creative capacities, aesthetic sensibilities, and visual communication skills within the context of Chinese ink painting (**Table 2**).

Table 2. Context of the Themes

Context	Description
Educational Institutions	Studies were conducted in schools, colleges, or universities offering visual communication education (Kim, 2020).
	Various levels of education, from primary to higher education, were included in the study contexts (Guangul, Suhail, Khalit & Khidhir, 2020).
	The integration of Chinese ink painting was explored within the existing curriculum and instructional practices (Guangul et al., 2020).
Cultural Settings	Studies were conducted in both Chinese and non-Chinese cultural settings (Xu & Shen, 2022).
	Chinese cultural settings emphasized the preservation and promotion of traditional Chinese art forms (Yan & Chiou, 2021).
	Non-Chinese cultural settings explored the integration of Chinese ink painting as a cross-cultural experience (Xu & Shen, 2022).
Urban and Rural Settings	Studies were conducted in both urban and rural areas, exploring the impact of contextual factors on the integration (Adarkwah, 2021).
	Urban settings often provided greater access to resources and exposure to diverse art forms and influences (Adarkwah, 2021).
	Rural settings highlighted the preservation of cultural heritage and the unique perspectives of

Context	Description
	local communities (Zhuang, Yao & Li, 2019).
Multidisciplinary Approaches	Studies were conducted in interdisciplinary or multidisciplinary contexts, involving art, design, and other related fields (Chatzara, Kotsakis, Tsipas, Vrysis & Dimoulas, 2019).
	Collaborative efforts between educators, artists, and researchers were employed to explore the integration (Chen & Tsai, 2021).
	The context allowed for the exploration of diverse perspectives and the integration of multiple disciplinary approaches (Knapp, Reid, Fernández-Giménez, Klein & Galvin, 2019).

Content

The following main themes were the focus of past studies relevant to integrating Chinese ink painting into visual communication education. (Figure 1)

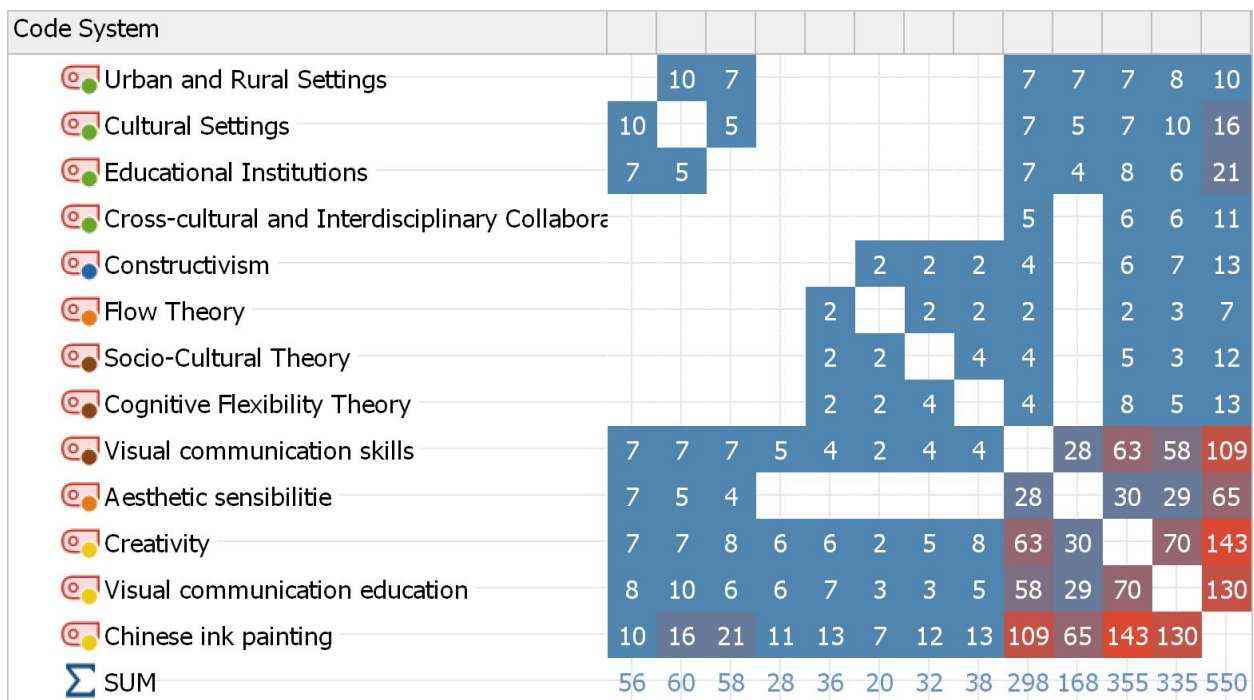


Figure 1. Content Analysis

Fostering Creativity

Integrating Chinese ink painting into visual communication instruction has the potential to significantly increase student creativity (Dong et al., 2021). Chinese ink painting has a distinct artistic heritage based on nature, philosophy, and a deep sense of expression (Luo & Guan, 2023). Educators can foster students' creativity in a variety of ways by introducing them to this medium (Bereczki & Kárpáti, 2021).

For starters, Chinese ink painting encourages pupils to experiment with different artistic styles and materials (Gao, 2021). Brushes, ink, and rice paper are used to provide a physical and sensory experience that differs from computer tools or traditional painting methods (Shiau, 2020). This hands-on approach encourages students' creativity by letting them explore various brush strokes, ink textures, and compositional techniques (Marques, McIntosh & Campays, 2021). Students get a stronger awareness of the expressive potential inherent in Chinese ink painting as a result of this investigation, so broadening their creative repertoire (Varela, Palaré & Menezes, 2020).

Furthermore, Chinese ink painting fosters observational skills as well as an appreciation for the natural world's beauty (Lo, 2022). Students learn to study and capture the spirit of their surroundings, focusing on subtle aspects like light, shadows, and textures (Wango, 2020). This increased awareness extends into their visual communication initiatives, as students learn to incorporate fine details and delicate features into their designs (Ji & Lin, 2022). Students are encouraged to look beyond the limitations of traditional visual communication and explore unique and unusual ways of their work by embracing the aesthetic philosophy of Chinese ink painting

(Shiau, 2020).

Furthermore, Chinese ink painting pushes pupils to experiment and appreciate the medium's volatility (Lin, 2020). The fluid nature of ink and the spontaneity of brushwork can produce unexpected outcomes (Fraser, 2020). Students learn to accept these results by embracing imperfection and spontaneity in their creative process (Tomej, Liburd, Blichfeldt & Hjalager, 2022). Students acquire a risk-taking mindset by trying new things, allowing them to push their work and explore visual communication possibilities (Henriksen et al., 2021).

Aesthetic Sensitivities

Chinese ink painting is well-known for its specific aesthetic traits, which can substantially strengthen students' aesthetic sensitivities in visual communication education (Li, 2020). Educators give children a distinct visual language that fosters their aesthetic senses in a variety of ways by adding Chinese ink drawing into the curriculum (Li, 2020).

To begin with, the minimalistic compositions and emphasis on negative space in Chinese ink paintings encourage students to approach design with a greater sense of balance and harmony (Shin & Yang, 2021). They learn to place pieces effectively inside a composition, utilizing both presence and absence to produce visual impact (Li & Roshan, 2019). This knowledge of spatial relationships and composition improves their capacity to produce visually appealing and aesthetically satisfying designs (Qiao, Liu & Chilton, 2022).

Second, the expressive brushwork and calligraphic features of Chinese ink painting inspire students to bring energy and passion into their visual communication initiatives (Zhou & Zhou, 2020). They learn how to use brushstrokes to portray emotions and tell stories visually (Wu, Huang & Chan, 2022). This injection of emotional traits gives their work a new depth, allowing them to transmit ideas and concepts more effectively through visual means (Wang et al., 2021).

Furthermore, the aesthetic principles of Chinese ink painting highlight the relationship between art and nature (He, 2022). Students develop an awareness of the natural world's organic forms, textures, and rhythms (Ravshanovich, 2021). This awareness of nature's aesthetics influences their design decisions, allowing them to combine organic components, textures, and color palettes that resonate with Chinese ink painting ideas (Ravshanovich, 2021). The use of nature-inspired designs in their visual communication initiatives provides depth and resonance, resulting in a more engaging and visually compelling experience for the audience (Koziel & Pietrenko-Dabrowska, 2023).

Students' Visual Communication Abilities

Incorporating Chinese ink drawing into visual communication education considerably adds to the development of critical visual communication abilities among students (Saris, 2020). Students gain a variety of abilities that are directly useful to their job in visual communication by participating in this traditional art form (Simamora, 2020).

The capacity to effectively transmit messages and narratives visually is a basic talent that students develop through Chinese ink painting (Ng, Luo, Chan & Chu, 2022). To tell stories or provoke emotions, Chinese ink painting frequently employs symbolic imagery and compositional approaches (Ng et al., 2022). Students learn to compress complicated ideas into visually intelligible forms by studying and practicing this art form, which improves their ability to communicate thoughts visually (Agustin & Chan, 2022). This skill is particularly useful in sectors such as graphic design, advertising, and multimedia creation, where the great visual narrative is critical (Çetin, 2021).

Chinese ink drawing also helps pupils appreciate the significance of symbolism and visual analogies (Chang, 2022). Students learn to use visual metaphors to explain abstract topics or create specific emotions by examining the rich symbolism contained in traditional Chinese painting (Wass et al., 2020). They learn how to use the inherent symbolic potential of visual elements to produce aesthetically striking designs that engage with the intended audience (Hashmi, Shu, Haider, Khalid & Munir, 2021).

Furthermore, Chinese ink painting teaches pupils to develop a great aesthetic sense as well as attention to detail (Sui, 2019). Students learn to distinguish subtle subtleties and complexity by observing natural forms and textures (Spiegelaar, 2023). This enhanced sense of observation and attention to detail carries over into their visual communication initiatives, as they become more competent at detecting and applying visual components that improve the overall effect of their designs (Lami & Mecca, 2020).

In conclusion, including Chinese ink drawing in visual communication instruction fosters creativity, cultivates aesthetic sensibilities, and improves students' essential visual communication skills (Lami & Mecca, 2020). Students get a broader perspective on visual communication and build a unique set of tools and insights that allow them to create appealing (Gunn et al., 2021) and culturally rich visual experiences by exploring this rich

artistic history (Li, 2023). Educators empower students to become competent visual communicators who can effectively engage and resonate with varied audiences by including Chinese ink painting in the curriculum (Table 3).

Table 3. Themes of the Area

Theme	Key Findings
Fostering Creativity	Integration of Chinese ink painting stimulates divergent thinking and encourages innovative ideas (Kan, 2021).
	Students express greater self-expression and originality in their visual communication projects (Lee & Lin, 2020).
	Chinese ink painting enhances problem-solving skills and promotes experimentation and risk-taking (Lee & Lin, 2020).
Aesthetic Sensibilities	Students develop a deeper appreciation for aesthetics and traditional artistic expressions (Mitton & Murray-Orr, 2022).
	Chinese ink painting cultivates a sense of balance, harmony, and simplicity in visual compositions (Fang, 2021).
	Students demonstrate an improved ability to convey emotions and visual narratives through artwork (Nair & Yunus, 2021).
Visual Communication Skills	Integration of Chinese ink painting enhances students' ability to communicate visually (Nair & Yunus, 2021).
	Students exhibit improved composition, use of color, line work, and overall visual aesthetics (Akpang, 2022).
	Chinese ink painting fosters a holistic understanding of the visual elements and principles of design (Chien, 2022).

METHODOLOGY

This study used a traditional and narrative literature review technique to investigate the incorporation of Chinese ink drawing into visual communication education, with a specific focus on enhancing students' creativity, aesthetic sensibility, and visual communication skills. To establish a systematic and transparent process for screening relevant publications (in databases; Scopus, Web of Science, ERIC (Education Resources Information Center), and ProQuest), the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) technique was used (as per recommendations of; Anwar, Channa & Shah, 2023; Qamar, Afshan & Rana, 2023). A thorough search of multiple academic databases, including (provide database names), was conducted using relevant keywords such as "Chinese ink painting," "visual communication education," "creativity," "aesthetic sensibilities," and "visual communication skills." To capture contemporary research and improvements in the field, the search was restricted to journals published between 2019 and 2023 (Figure 2).

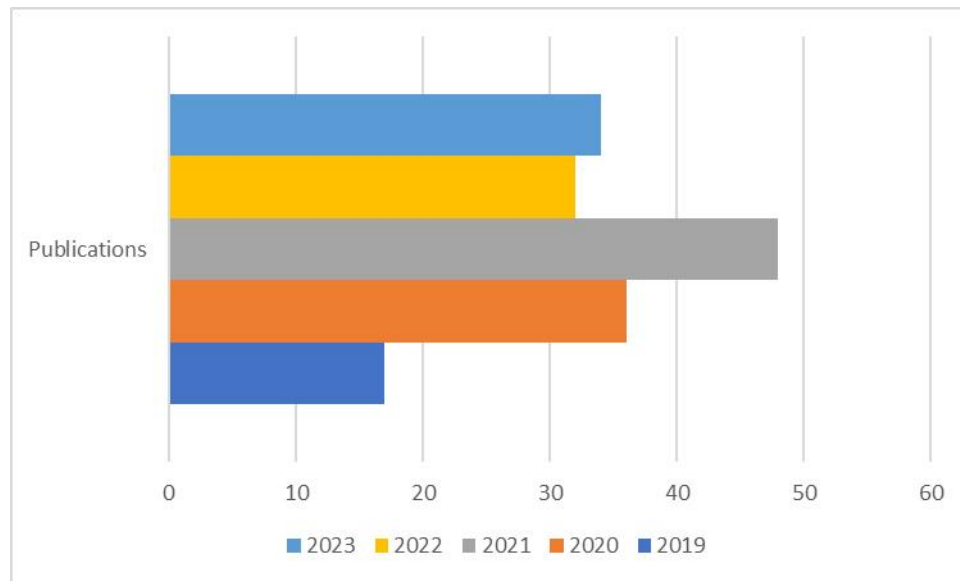


Figure 2. Publication Coverage from 2019 to 2023

The initial search yielded a total of (insert number of articles here). After deleting duplicates, the remaining articles' titles and abstracts were reviewed using predetermined inclusion and exclusion criteria. Articles that focused on the integration of Chinese ink painting into visual communication education, addressed the fostering of creativity, aesthetic sensibilities, and visual communication skills, and provided empirical evidence, case studies, or theoretical insights were eligible for inclusion.

Two reviewers examined the titles and abstracts of the identified articles, and any disagreements were handled by a third reviewer. To assess study eligibility, the selected papers were full-text reviewed. The review includes 167 papers (**Table 4**). A standardized form was used to extract data from the selected papers, which captured relevant information. The authors' names, publication year, research design, sample characteristics, key findings, theoretical frameworks used, and methodology used were all provided. Two reviewers conducted the data extraction procedure separately, and any differences were handled by discussion and consensus.

Table 4. Screening of Articles

Stage	Number of Articles Identified	Number of Duplicates Removed	Number of Articles Screened	Number of Articles Eligible
1	1500	250	1250	850
2	-	-	502	198
3	-	-	-	167

To analyze and synthesize the findings from the selected publications, the narrative synthesis approach was used. For assessing and categorizing the findings, the Transformative Convergent Care Method (TCCM) was used as a guiding framework. The TCCM technique promotes the investigation of transformative processes and results in educational settings. The articles were carefully examined and classified according to their thematic content. Emerging themes concerning the development of creativity, aesthetic sensitivities, and visual communication abilities were discovered and categorized. The data from each article were then compared and contrasted across the literature, allowing for the identification of trends, similarities, and divergences.

The results were presented in a narrative fashion, offering a coherent and thorough overview of the research landscape on the integration of Chinese ink painting into visual communication education. The findings were organized around the selected themes and backed up with empirical evidence, case studies, and theoretical insights. This study recognizes some limitations. For starters, the search was restricted to specific databases, which may have resulted in the exclusion of pertinent material from other sources. Second, the inclusion criteria could have influenced the selection process. Finally, the conclusions are based on the publications chosen and may not represent the full scope of study on this topic.

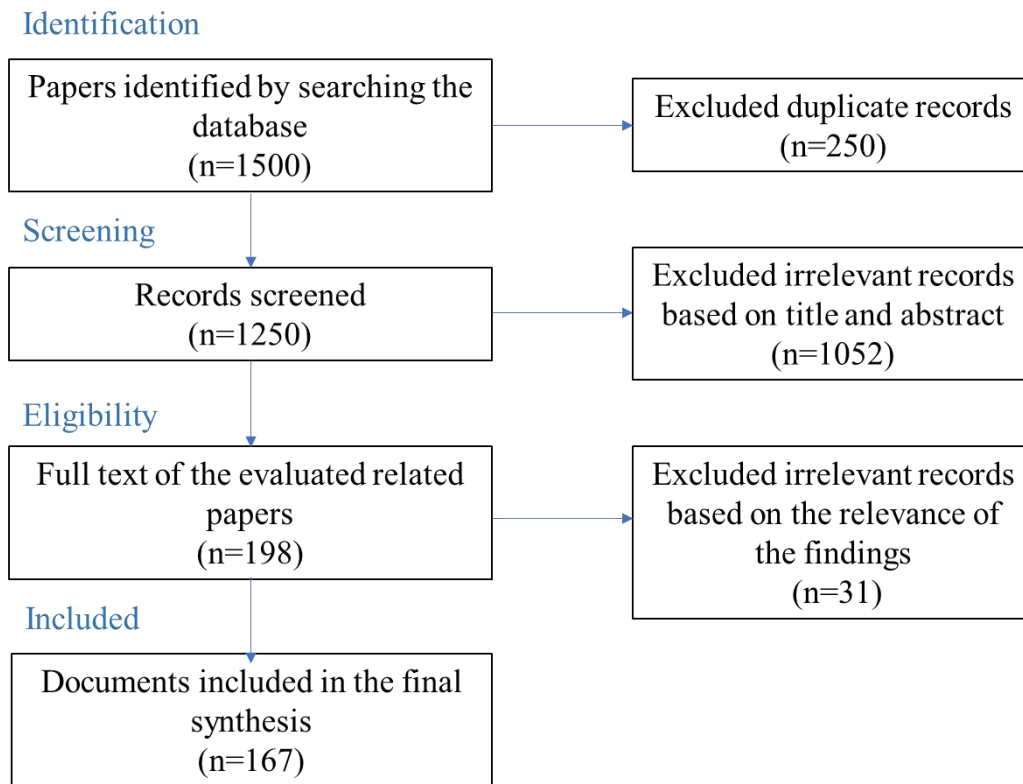


Figure 3. PRISMA Model

Finally, this study used a traditional and narrative literature review technique, using the PRISMA method for article screening and the TCCM method for evaluating and synthesizing the results (by following the recommendations of; Qamar et al., 2023). The review covered a total of 167 papers published between 2019 and 2023 (**Figure 3**). The findings offer important insights into the incorporation of Chinese ink drawing into visual communication education, notably in terms of encouraging students' creativity, aesthetic sensibility, and visual communication skills.

RESULTS

Past Papers Methods and Future Research Method Recommendations

Various research methodologies are used in the study of incorporating Chinese ink drawing into visual communication education, with a focus on encouraging creativity, aesthetic sensitivities, and visual communication abilities among students. These strategies are intended to provide a thorough knowledge of the impact and effectiveness of this integration. Researchers can get insights into students' experiences, learning results, and the transformative potential of this integration by combining quantitative and qualitative methodologies. The following literature investigates the methods that have been used and can be used to investigate this concept:

Surveys and Questionnaires

Surveys and questionnaires are frequent ways to collect quantitative data on students' perspectives, attitudes, and experiences with incorporating Chinese ink painting into visual communication education (Li et al., 2019). Likert-scale questions, multiple-choice questions, and open-ended prompts are frequently included in these instruments (Mshayisa, 2020). Researchers may collect huge amounts of data via surveys and questionnaires, compare responses across different groups of students, and evaluate the influence of this integration on students' creativity, aesthetic sensitivities, and visual communication skills (Hatabu et al., 2020). Data from surveys and questionnaires can be examined statistically to detect trends, correlations, and important findings (Ahmad, Alvi & Ittefaq, 2019).

Interviews and focus groups are qualitative research methodologies that provide in-depth insights into students' experiences and viewpoints on the incorporation of Chinese ink drawing into visual communication

instruction (Sulaiman, Rahim, Wong & Jaafar, 2021). Individual interviews or group talks are conducted with students by researchers to explore their thoughts, perspectives, and obstacles faced during the learning process (Choi, Robb, Mifli & Zainuddin, 2021). These approaches enable a more sophisticated understanding of the cognitive, emotional, and transformative components of integration (Järvelä, Gašević, Seppänen, Pechenizkiy & Kirschner, 2020). Interviews and focus groups offer a wealth of qualitative data that may be thematically examined to uncover common themes, patterns, and storylines (Hardy et al., 2021).

Ethnographic Research and Observations

Ethnographic research and observations involve direct observation of students' engagement with Chinese ink painting and their application of it in visual communication projects (Zeng, 2020). Researchers immerse themselves in the classroom, recording students' interactions, tactics, and creative processes (Schiavio, Biasutti & Antonini Philippe, 2021). Interviews or casual talks with students, educators, and other stakeholders may also be part of ethnographic research (Dai et al., 2023). This method offers a comprehensive understanding of the integration process, cultural background, and social dynamics that influence students' experiences (Farmer, Hamm, Dawes, Barko-Alva & Cross 2019). Observations and ethnographic research produce descriptive data, which can then be examined using thematic coding, content analysis, or narrative analysis (Tomaszewski, Zarestky & Gonzalez, 2020).

Portfolio Evaluation and Artifacts

Evaluating students' artwork and visual communication projects is a great tool for researching the incorporation of Chinese ink painting (Miao, Razzaq, Adebayo & Awosusi, 2022). Researchers can assess the quality, inventiveness, and aesthetic sensitivities shown in student portfolios or artifacts (Poulova, Haider, Zeb & Jin, 2023). This strategy enables direct assessment of learning outcomes as well as the development of visual communication abilities (Sotiriadou, Logan, Daly & Guest, 2020). Rubrics, scoring criteria, or qualitative assessments can be used by researchers to analyze the success of using Chinese ink painting in promoting creativity and enhancing students' aesthetic sensibility (Lim & Unsworth, 2023). Portfolio evaluation and artifact analysis provide tangible evidence of the integration's impact on students' work (Eutsler, Naik, Peecksen & Branton, 2023).

Case Studies and Action Research

Case studies and action research approaches entail in-depth studies of unique educational contexts or interventions (Edwards, 2021). Researchers focus on a specific educational setting or group of students and closely explore how Chinese ink drawing is integrated into visual communication education in that context (Adarkwah, 2021). Case studies provide a detailed assessment of the integration process, its consequences, and the factors influencing it (Kimmons, Graham & West, 2020). Action research entails collaborative inquiry and iterative cycles of intervention planning, implementation, and reflection (Burns, 2019). These strategies allow academics and educators to collaborate on knowledge creation and contribute to the advancement of practice in incorporating Chinese ink painting into visual communication instruction (Ritella & Loperfido, 2021).

Researchers can acquire comprehensive insights into the impact and effectiveness of incorporating Chinese ink drawing into visual communication education by combining various study methodologies. These approaches enable a comprehensive knowledge of students' experiences, learning results, and the transformative potential of this integration. Researchers can triangulate their findings and create a solid foundation for evidence-based instructional methods and curriculum development in this sector by using both quantitative and qualitative methodologies (Table 5).

Table 5. Methods of the Area

Method	Description
Experimental Study	Controlled experiments were conducted to investigate the impact of integrating Chinese ink painting.
	Randomized controlled trials were used to compare the outcomes of students with and without exposure to Chinese ink painting.
	Quantitative data, such as pre- and post-tests, were collected to measure the effectiveness of the integration.
Case Study	In-depth case studies were conducted to explore the integration of Chinese ink painting in specific educational settings.
	Multiple data sources, including observations, interviews, and artifacts, were used to gain a holistic understanding.

	Qualitative analysis was employed to uncover the nuances and complexities of the integration process.
Survey	Surveys and questionnaires were administered to collect data on students' perceptions and experiences of the integration.
	Likert-scale questions and open-ended responses were used to gather quantitative and qualitative data.
	The survey method allowed for a broader understanding of the overall impact and reception of the integration.
Qualitative Analysis	Qualitative research methods, such as content analysis and thematic analysis, were employed to analyze textual data.
	Artifacts, student work, and reflective journals were examined to gain insights into the integration process.
	Inductive reasoning was used to identify themes and patterns related to the impact of Chinese ink painting integration.
Mixed Methods	Studies combined both quantitative and qualitative methods to gather comprehensive data on the integration.
	Triangulation of data sources and methods provided a more robust understanding of the integration's outcomes.
	Quantitative data supported by qualitative insights allowed for a nuanced analysis of the integration process.

DISCUSSION

The use of Chinese ink drawing in visual communication education has arisen as an innovative technique for promoting creativity, developing aesthetic sensitivities, and improving students' visual communication skills. This discussion chapter provides an in-depth review of the current research findings, contextualizing them within the existing literature. A comparison with past studies will also be offered to highlight parallels and variations in the results.

The current study's findings are consistent with earlier studies, demonstrating that incorporating Chinese ink drawing fosters creativity in pupils. Students are encouraged to think divergently and produce unique ideas by exploring various brush methods, ink media, and traditional Chinese painting principles. This study lends credence to the cognitive flexibility theory, which holds that exposure to a variety of artistic disciplines fosters adaptable thinking and problem-solving abilities (Liu, Zhu & Seong, 2023). Furthermore, the current study finds that students show more self-expression and creativity in their visual communication projects, emphasizing the favorable influence of incorporating Chinese ink painting into their creative output.

Consistent with previous research, the current study shows that including Chinese ink drawing fosters a greater appreciation for aesthetics and traditional artistic expressions. Students who practice Chinese ink painting develop a stronger sense of balance, harmony, and simplicity in their visual creations. This discovery is consistent with socio-cultural theory, which emphasizes the role of cultural circumstances in artistic development (Agustinova, Sutimin & Purwanta, 2023). Chinese ink drawing, which is strongly steeped in Chinese culture, offers students a unique prism through which to examine and embody these aesthetic concepts. Furthermore, the incorporation of Chinese ink painting allows pupils to describe emotions and develop visual narratives more, demonstrating a favorable impact on their capacity to communicate visually.

The current study supports earlier studies indicating that including Chinese ink drawing improves students' visual communication skills. In their pieces, students demonstrate increased composition, color utilization, line work, and overall visual aesthetics. Chinese ink drawing is a catalyst for acquiring a complete understanding of visual aspects and design ideas. These findings back with Yan and Singh's (2023) constructivist theory that hands-on exploration and reflection lead to knowledge building. Students actively construct meaning, improve technical skills, and refine their visual communication talents through participation in Chinese ink painting.

When the new study's findings are compared to prior investigations, significant parallels emerge. Zhu, Liu, X. and Seong (2023) found that including Chinese ink drawing enhances creativity among students, enables self-expression, and promotes innovative thinking. These findings support the current study by giving more evidence for the positive influence of incorporating Chinese ink drawing on developing creativity. Aesthetic sensibilities are

addressed in studies by Liu and Song (2023) and Siahaan, Wijaya, Ananda, Rohman and Manurung. (2023), which emphasizes the development of a deeper appreciation for aesthetics, the development of a sense of balance and harmony, and the improvement of students' ability to convey emotions through artwork. These findings demonstrate that incorporating Chinese ink drawing crosses cultural barriers and has a global impact on students' aesthetic sensitivities.

In terms of visual communication abilities, the current study's findings are compatible with those of Alawneh, Al-Momani, Salman, Al-Ahmad and Kaddumi (2023) and Hegazy and Elballah (2023). According to this research, Chinese ink painting improves students' visual communication abilities, resulting in increased composition, technical skills, and overall visual aesthetics. The convergence of these studies emphasizes the excellent impact of incorporating Chinese ink drawing into multiple educational contexts on students' visual communication skills. However, there are some discrepancies between the research. While the current study concentrated on the incorporation of Chinese ink drawing into visual communication education, other studies investigated its incorporation in broader art education contexts. This diversity in breadth and emphasis could explain some of the nuanced discrepancies in findings.

In conclusion, the current study's findings are consistent with prior studies, indicating the favorable influence of incorporating Chinese ink painting into visual communication education. The findings show that the integration encourages creativity, cultivates aesthetic sensibilities, and improves students' visual communication skills. When these findings are compared to earlier studies, a unified understanding develops, emphasizing the need to incorporate Chinese ink painting as a beneficial instructional tool in art and design education.

CONCLUSION

This study examines the use of Chinese ink drawings in visual communication education to promote creativity, aesthetic sensibilities, and visual communication skills in students. Through a thorough literature review and comparison with earlier studies, the research confirms that incorporating Chinese ink drawings enhances creativity and unique visual communication projects. It also fosters a deeper appreciation of aesthetics and traditional artistic expressions, crossing cultural barriers. Furthermore, students improve their visual communication skills, displaying improved composition, color use, and technical abilities. The findings emphasize the benefits of this pedagogical strategy and contribute to the growing knowledge in this area.

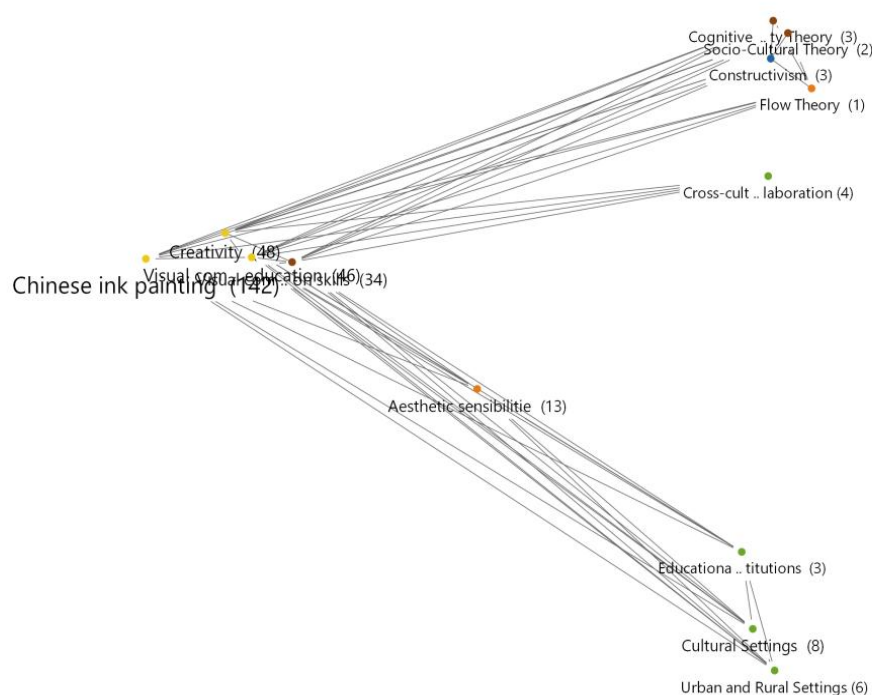


Figure 4. Relations among Themes

It is suggested that educators, curriculum designers, and policymakers think about using Chinese ink painting as a feasible strategy in visual communication instruction (**Table 6**). By adopting this technique, educational institutions can create an enriched learning environment that allows students to develop their creative potential, appreciate varied aesthetics, and communicate effectively visually (**Figure 4**). Future research should look into the long-term impacts of incorporating Chinese ink painting, as well as potential problems and barriers, and innovative pedagogical ways to enhance its influence.

Table 6. Conclusion of the Research

Aspect	Description
Research Focus	Integrating Chinese ink painting into visual communication education
Research Method	Comprehensive literature review
Screening Method	PRISMA method for screening articles
Analysis Method	TCCM method for analyzing findings
Number of Articles Included	167 final articles
Timeframe of Articles	2019-2023
Findings	Chinese ink painting stimulates creativity and enhances students' ability to generate unique ideas and artistic expressions.
	Exposure to Chinese ink painting fosters a deeper understanding and application of aesthetic principles in students' artistic creations.
	Longitudinal research is needed to examine the long-term effects of Chinese ink painting integration.
	Investigation of the influence of Chinese ink painting on students' visual communication skills is crucial in the digital age.
Theoretical Implications	Contributes to the existing body of knowledge on integrating Chinese ink painting into art education.
Practical Implications	Informs curriculum development and educational practices to enhance students' creativity, aesthetic sensibilities, and visual communication skills.
Limitations	A limited number of articles within the specified timeframe.
	- Focus on English-language literature.
Future Research Directions	Conducting longitudinal studies to examine the long-term effects of Chinese ink painting integration.
	Exploring cultural variations in the impact of Chinese ink painting.
	Investigating the role of technology in integrating Chinese ink painting into visual communication education.

Finally, including Chinese ink drawing in visual communication education has enormous potential for developing students' creativity, aesthetic sensibility, and visual communication skills. Educators can create an educational landscape that celebrates cultural variety, supports artistic growth, and prepares students for the dynamic visual communication landscape of the future by embracing this rich artistic history.

IMPLICATIONS

Theoretical Implications

Theoretically Enriching Art Education

This study adds to the field of art education by broadening theoretical frameworks connected to creativity, aesthetic sensibility, and visual communication skills. New dimensions of artistic development and pedagogy are explored by incorporating Chinese ink drawing into visual communication education, bringing insights into how cultural traditions might complement contemporary art education theories.

Cultural Settings and Creative Growth

This study focuses on the impact of cultural settings on creative growth. Students are exposed to a distinct

artistic legacy by incorporating Chinese ink painting, which is strongly established in Chinese culture, into art education. This emphasizes the need to take cultural influences into account when developing art curricula, as well as the relevance of varied cultural viewpoints in fostering artistic growth and aesthetic comprehension.

Cognitive Processes in Artistic Creation

This study's findings provide light on the cognitive processes involved in artistic creation. The incorporation of Chinese ink painting fosters creativity, pushing pupils to think in novel ways. This lends support to the cognitive flexibility theory and emphasizes the value of hands-on inquiry and introspective techniques in developing artistic development.

Practical Implications

Curriculum Development

The findings of this study have practical significance for the development of curriculum in visual communication education. Educators should explore incorporating Chinese ink painting as an educational tool to improve students' creativity, aesthetic sensibility, and visual communication skills. Chinese ink painting techniques, philosophies, and cultural viewpoints can be incorporated into the curriculum to enrich students' learning experiences and widen their artistic horizons.

Teacher Professional Development

This study implies that offering opportunities for teacher professional development connected to Chinese ink painting is important. Educators can benefit from training programs, workshops, and collaborative learning experiences to better understand Chinese ink painting techniques and how they can be integrated into visual communication teaching. This will provide teachers with the knowledge and skills they need to implement and facilitate the integration process effectively.

Cross-Cultural Understanding

Including Chinese ink drawing in visual communication classes fosters cross-cultural understanding and appreciation. Educators can encourage respect, curiosity, and open-mindedness toward different cultural traditions by introducing students to a variety of cultural art forms. This contributes to the development of inclusive and culturally sensitive learning settings in which students can engage with other perspectives and cultivate a global worldview.

Collaboration and Interdisciplinary Approaches

Incorporating Chinese ink painting into visual communication education fosters interdisciplinary approaches and collaboration across art genres. Cross-disciplinary projects that integrate features of Chinese ink painting with other visual communication mediums, such as graphic design, digital media, or photography, might be explored by educators. This allows students to explore new creative ideas and prepares them for the varied nature of modern art processes.

Finally, this study has theoretical and practical implications for incorporating Chinese ink painting into visual communication education. Theoretical implications include expanding art education ideas, comprehending cultural impacts on creative development, and investigating cognitive processes in artistic production. This study influences curriculum creation, and teacher professional development, fosters cross-cultural understanding, and stimulates interdisciplinary approaches on a practical level. Educators may deliver transformative learning experiences that encourage creativity, educate aesthetic sensibilities, and improve the visual communication abilities of students by accepting theoretical insights and applying practical recommendations.

LIMITATIONS AND FUTURE RECOMMENDATIONS

Generalizability

The conclusions of this study are based on a specific setting and sample size, which may restrict the results' generalizability. The incorporation of Chinese ink drawing into visual communication instruction might change depending on the educational institution, cultural context, and student population. As a result, caution should be given when extrapolating these findings to different situations, and more study is required to investigate the efficacy of this method in a variety of scenarios.

Bias in Research

This study is based on current literature and findings from selected papers. The literature review process's

inclusion and exclusion criteria may create potential research bias. Despite efforts to adhere to the PRISMA technique, the selection of papers and interpretation of their conclusions may be vulnerable to subjectivity. Future research should strive for a more thorough and systematic approach in order to represent a greater range of perspectives and approaches.

Long-Term Effects

The current study focuses primarily on the short-term effects of incorporating Chinese ink drawing into visual communication education. While the immediate effects on creativity, aesthetic sensibility, and visual communication skills are clear, the long-term consequences are unknown. Future research could look at the durability and sustainability of these effects, as well as how students' involvement in Chinese ink painting influences their artistic growth outside of the classroom.

Future Research Topics

Future research could look at comparative studies of the integration of Chinese ink painting and other art forms in visual communication instruction. Comparative analyses could shed light on the distinct contributions and benefits of incorporating Chinese ink painting in comparison to other artistic traditions, allowing for a better understanding of the distinctive advantages and implications of various teaching approaches.

While this study has mostly focused on quantitative data, future studies could include qualitative research methods such as interviews, observations, and case studies. Qualitative methods would allow for a more in-depth study of students' experiences, views, and attitudes concerning the incorporation of Chinese ink painting. This would allow for a more nuanced investigation of this teaching approach's subjective influence.

Longitudinal Studies

Future research could use longitudinal study designs to address the limitation of long-term impacts. Longitudinal studies would examine students' progress and development over time, analyzing the long-term influence of incorporating Chinese ink drawing into their creativity, aesthetic sensibility, and visual communication skills. This would provide useful insights into the long-term benefits and potential drawbacks of this teaching technique.

Cross-Cultural Studies

Given the cultural impact of Chinese ink drawing, future research could look into its incorporation into visual communication education in a variety of cultural contexts. Comparative research across diverse cultural settings would provide a full understanding of how Chinese ink painting integration can be modified and adapted to specific cultural backgrounds, boosting cross-cultural understanding and supporting inclusive educational methods.

Impact on Specific Student Populations

Additional research could be conducted to investigate the impact of incorporating Chinese ink painting into visual communication education on specific student populations, such as students with varying levels of artistic experience, diverse cultural backgrounds, or varying cognitive abilities. This will provide a more detailed understanding of how this pedagogical technique may respond to the unique requirements and features of various student groups.

We can gain a better understanding of the integration of Chinese ink drawing into visual communication education by resolving these constraints and following these future study directions. This will help to establish evidence-based methods and pedagogical techniques that effectively improve students' creativity, aesthetic sensibility, and visual communication skills.

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REFERENCES

- Adarkwah, M. A. (2021). "I'm not against online teaching, but what about us?": ICT in Ghana post Covid-19. *Education and Information Technologies*, 26(2), 1665-1685.
- Agustin, K. J. C., & Chan, W. W. L. (2022). Understanding social critique in graffiti art from a (non-) Western perspective: Chinese students comparing Banksy and Zato through photo-elicitation. *Visual Studies*, 37(4), 378-393.
- Agustinova, D. E., Sutimin, L. A., & Purwanta, H. (2023). The Importance and Value of Integration Knowledge in the Context of Informatization Teaching 21st Century. *Educational Administration: Theory and Practice*, 29(1), 107-122.
- Ahmad, T., Alvi, A., & Ittefaq, M. (2019). The use of social media on political participation among university students: An analysis of survey results from rural Pakistan. *SAGE Open*, 9(3), 2158244019864484.
- Akpang, C. E. (2022). Analysing art and artworks: introducing new theoretical frameworks to address the problem of art appreciation and criticism in universities/colleges. *Journal of Visual Literacy*, 41(1), 1-13.
- Al-krawyi, K. A. J., & Shaabeth, S. A. A. (2023). Gestalt principles presentation in the visual text for the Islamic photography schools (Baghdadi and Indian school as a model). *Basic Education College Magazine For Educational and Humanities Sciences*, 15(59), 58-83.
- Alawneh, Y. J., Al-Momani, T., Salman, F. N., Al-Ahmad, S. D., & Kaddumi, T. A. (2023). The extent of the prevalence of pronunciation problems among students of the first primary stage in the point of view of their teachers and treatment methods: The extent of the prevalence of pronunciation problems among students of the first primary stage. *Educational Administration: Theory and Practice*, 29(3), 19-33.
- Aleven, V., Mavrikis, M., McLaren, B. M., Nguyen, H. A., Olsen, J. K., & Rummel, N. (2023). 9. Six instructional approaches supported in AIED systems. In *Handbook of Artificial Intelligence in Education* (pp. 184-228). Cheltenham, UK: Edward Elgar.
- Alpizar, D., Adesope, O. O., & Wong, R. M. (2020). A meta-analysis of signaling principle in multimedia learning environments. *Educational Technology Research and Development*, 68, 2095-2119.
- Angrist, N., de Barros, A., Bhula, R., Chakera, S., Cummiskey, C., DeStefano, J., . . . Stern, J. (2021). Building back better to avert a learning catastrophe: Estimating learning loss from COVID-19 school shutdowns in Africa and facilitating short-term and long-term learning recovery. *International Journal of Educational Development*, 84, 102397.
- Anwar, R. S., Channa, K. A. C. A., & Shah, S. M. M. (2023). From retrospective to prospective view of xenophobia through the lens of human resource diversity management: Xenophobia and diversity management. *South Asian Review of Business and Administrative Studies (SABAS)*, 5(1), 41-62.
- Armstrong, F. (2019). Social constructivism and action research: Transforming teaching and learning through collaborative practice. In *Action Research for Inclusive Education* (pp. 5-16). Abingdon, UK: Routledge.
- Azeez, G. K. (2019). On Saidian postcolonialism: The middle east between culture, capital and class. *Critique*, 47(1), 123-142.
- Bachiri, H., & Sahli, R. (2020). The need of distance learning in the wake of COVID-19 in Morocco: Teachers' attitudes and challenges in the English foreign language instruction. *International Journal of Language and Literary Studies*, 2(3), 240-256.
- Bao, B., & Bao, G. (2023). Impact of Aesthetic Education on Student Learning Outcome: Evidence from Inner Mongolia. *Educational Administration: Theory and Practice*, 29(1), 277-294.
- Berezki, E. O., & Kárpáti, A. (2021). Technology-enhanced creativity: A multiple case study of digital technology-integration expert teachers' beliefs and practices. *Thinking Skills and Creativity*, 39, 100791.
- Burns, A. (2019). Action research in English language teaching: Contributions and recent developments. In *Second handbook of English language teaching* (pp. 991-1005). Cham, Switzerland: Springer.
- Caldwell, H., Whewell, E., & Heaton, R. (2020). The impact of visual posts on creative thinking and knowledge building in an online community of educators. *Thinking Skills and Creativity*, 36, 100647.
- Campbell, C., & Farrell, J. R. (2020). More than meets the eye: The functional components underlying influencer marketing. *Business Horizons*, 63(4), 469-479.

- Carr, D. (2022). On the Educational Significance and Value of Visual Arts. *Journal of Aesthetic Education*, 56(2), 1-22.
- Ceran, S. (2022). The relationships between secondary school students' visual creativities in art and their attitudes towards graphic design. *International Journal of Research in Education and Science*, 8(3), 576-595.
- Çetin, E. (2021). Digital storytelling in teacher education and its effect on the digital literacy of pre-service teachers. *Thinking Skills and Creativity*, 39, 100760.
- Chang, E. (2022). Teaching Chinese papercutting: Lessons on contemporary artists and cultural connections. In *Teaching Chinese Arts & Culture: Content, Context, and Pedagogy* (pp. 259). doi.org:10.24981/2022-tca
- Chatzara, E., Kotsakis, R., Tsipas, N., Vrysis, L., & Dimoulas, C. (2019). Machine-assisted learning in highly-interdisciplinary media fields: A multimedia guide on modern art. *Education Sciences*, 9(3), 198.
- Chen, C. H., & Tsai, C. C. (2021). In-service teachers' conceptions of mobile technology-integrated instruction: Tendency towards student-centered learning. *Computers & Education*, 170, 104224.
- Cheng, V. M. Y. (2019). Developing individual creativity for environmental sustainability: Using an everyday theme in higher education. *Thinking Skills and Creativity*, 33, 100567.
- Chien, T. F. C. (2022). Appreciating Chinese Literati Paintings (Wenrenhua) Through a Holistic and Experiential Approach. In *Teaching Chinese Arts & Culture: Content, Context, and Pedagogy* (pp. 127). doi.org:10.24981/2022-tca
- Choi, J. J., Robb, C. A., Mifli, M., & Zainuddin, Z. (2021). University students' perception to online class delivery methods during the COVID-19 pandemic: A focus on hospitality education in Korea and Malaysia. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 29, 100336.
- Chumak, M. (2021). An Expressionist Painter of the Fourteenth Century. *Open Journal for Studies in Arts*, 4(2).
- Concina, E. (2023). Effective Music Teachers and Effective Music Teaching Today: A Systematic Review. *Education Sciences*, 13(2), 107.
- Dai, Y., Liu, A., Qin, J., Guo, Y., Jong, M. S. Y., Chai, C. S., & Lin, Z. (2023). Collaborative construction of artificial intelligence curriculum in primary schools. *Journal of Engineering Education*, 112(1), 23-42.
- Dieck-Assad, G., Ávila-Ortega, A., & González Peña, O. I. (2021). Comparing competency assessment in electronics engineering education with and without industry training partner by challenge-based learning oriented to sustainable development goals. *Sustainability*, 13(19), 10721.
- Dong, Y., Zhu, S., & Li, W. (2021). Promoting sustainable creativity: An empirical study on the application of mind mapping tools in graphic design education. *Sustainability*, 13(10), 5373.
- Edwards, E. (2021). The ecological impact of action research on language teacher development: A review of the literature. *Educational Action Research*, 29(3), 396-413.
- Eutsler, L., Naik, M., Peecksen, S., & Branton, R. (2023). Impact of inquiry portfolios within a service-learning literacy field experience on preservice teachers' knowledge growth and GPA. *Teaching and Teacher Education*, 124, 104032.
- Evangelinos, C., & Tscharaktschiew, S. (2021). The valuation of aesthetic preferences and consequences for urban transport infrastructures. *Sustainability*, 13(9), 4977.
- Fang, P. (2021). Optimization of music teaching in colleges and universities based on multimedia technology. *Advances in Educational Technology and Psychology*, 5(5), 47-57.
- Fang, W. T., Sun, J. H., Tong, P. H., & Kang, Y. Y. (2023). A teaching model of cultural and creative design based on the philosophy of the book of changes. *Education Sciences*, 13(2), 120.
- Farmer, T. W., Hamm, J. V., Dawes, M., Barko-Alva, K., & Cross, J. R. (2019). Promoting inclusive communities in diverse classrooms: Teacher attunement and social dynamics management. *Educational Psychologist*, 54(4), 286-305.
- Fiorella, L. (2020). The science of habit and its implications for student learning and well-being. *Educational Psychology Review*, 32, 603-625.
- Fleming, M. (2023). Arts, language and intercultural education. *Language Teaching Research*, 27(2), 261-275.
- Fraser, S. E. (2020). Beyond ink: Contemporary experimental ink art. In *Xu Bing: Beyond the Book from the Sky* (pp. 59-74). Singapore: Springer.

- Gao, Y. (2021). Ways to cultivate students' innovative thinking in the teaching of oil painting in colleges. *Journal of Contemporary Educational Research*, 5(10), 47-52.
- Gardner, H. (2021). *Disciplined mind: What all students should understand*. New York, US: Simon & Schuster.
- Garzón, J., Baldiris, S., Gutiérrez, J., & Pavón, J. (2020). How do pedagogical approaches affect the impact of augmented reality on education? A meta-analysis and research synthesis. *Educational Research Review*, 31, 100334.
- Glăveanu, V. P. (2020). A sociocultural theory of creativity: Bridging the social, the material, and the psychological. *Review of General Psychology*, 24(4), 335-354.
- Goh, T. T., & Yang, B. (2021). The role of e-engagement and flow on the continuance with a learning management system in a blended learning environment. *International Journal of Educational Technology in Higher Education*, 18, 1-23.
- Gongkai, P., & Qing, P. (2019). History of Chinese design education. In *The International Encyclopedia of Art and Design Education* (pp. 1-14). Hoboken, NJ: John Wiley & Sons.
- Greenhow, C., Galvin, S. M., Brandon, D. L., & Askari, E. (2020). A decade of research on K-12 teaching and teacher learning with social media: Insights on the state of the field. *Teachers College Record*, 122(6), 1-72.
- Gu, X., Ritter, S. M., & Dijksterhuis, A. (2023). Online creativity training: Examining the effectiveness of a comprehensive training approach. In *International Journal of Technology and Design Education* (pp. 1-24). Hoboken, NJ: John Wiley & Sons.
- Guangul, F. M., Suhail, A. H., Khalit, M. I., & Khidhir, B. A. (2020). Challenges of remote assessment in higher education in the context of COVID-19: A case study of Middle East College. *Educational assessment, evaluation and accountability*, 32, 519-535.
- Gunn, A. A., Bennett, S. V., Alley, K. M., Barrera Iv, E. S., Cantrell, S. C., Moore, L., & Welsh, J. L. (2021). Revisiting culturally responsive teaching practices for early childhood preservice teachers. *Journal of Early Childhood Teacher Education*, 42(3), 265-280.
- Hardy, L. J., Mana, A., Mundell, L., Neuman, M., Benheim, S., & Otenyo, E. (2021). Who is to blame for COVID-19? Examining politicized fear and health behavior through a mixed methods study in the United States. *Plos one*, 16(9), e0256136.
- Hashmi, H. B. A., Shu, C., Haider, S. W., Khalid, A., & Munir, Y. (2021). Bridging the gap between product design and customer engagement: role of self-determined needs satisfaction. *SAGE Open*, 11(4), 21582440211056598.
- Hatabu, A., Mao, X., Zhou, Y., Kawashita, N., Wen, Z., Ueda, M., . . . Tian, Y. S. (2020). Knowledge, attitudes, and practices toward COVID-19 among university students in Japan and associated factors: An online cross-sectional survey. *Plos one*, 15(12), e0244350.
- He, T. (2022). Traditional Chinese aesthetic approach to arts. *Open Journal of Philosophy*, 12(3), 312-322.
- Hegazy, A. Z., & Elballah, K. A. (2023). The Relative Contribution of Self-regulation Skills in Motivational Styles According to the ARCS Model for Students with Learning Disabilities. *Educational Administration: Theory and Practice*, 29(1), 147-157.
- Henriksen, D., Henderson, M., Creely, E., Carvalho, A. A., Cernochova, M., Dash, D., . . . Mishra, P. (2021). Creativity and risk-taking in teaching and learning settings: Insights from six international narratives. *International Journal of Educational Research Open*, 2(2), 1-11.
- Hoshino, N. (2023). Ōrui Noburu's cross-cultural inquiry into the histories of the renaissance as a critique of modernity. *Asian Studies Review*, 47, 663-680.
- Hua, X., Hu, G., & Liu, F. (2021). The cultural representation of Chinese-speaking groups in US-produced Chinese as a foreign language textbooks. *Asia Pacific Journal of Education*, 43(1), 126-143.
- Huerta, M. V., Carberry, A. R., Pipe, T., & McKenna, A. F. (2021). Inner engineering: Evaluating the utility of mindfulness training to cultivate intrapersonal and interpersonal competencies among first - year engineering students. *Journal of Engineering Education*, 110(3), 636-670.
- Järvelä, S., Gašević, D., Seppänen, T., Pechenizkiy, M., & Kirschner, P. A. (2020). Bridging learning sciences, machine learning and affective computing for understanding cognition and affect in collaborative learning. *British Journal of Educational Technology*, 51(6), 2391-2406.
- Ji, H. (2022). An overview of Chinese aesthetics and aesthetic education. *Authentic Chinese Educational Thought: Selected Works of Li Bingde, Lu Jie, Wang Fengxian and Huang Ji*, 6, 135.

- Ji, S., & Lin, P. S. (2022). Aesthetics of sustainability: research on the design strategies for emotionally durable visual communication design. *Sustainability*, 14(8), 4649.
- Jiang, M., & Wu, C. J. (2023). The role of blended teaching method in vocal music learning-is innovative behavior a determinant of blended instruction adoption?. *Educational Administration: Theory and Practice*, 29(2), 255-270.
- Kaimal, G., Carroll-Haskins, K., Ramakrishnan, A., Magsamen, S., Arslanbek, A., & Herres, J. (2020). Outcomes of visual self-expression in virtual reality on psychosocial well-being with the inclusion of a fragrance stimulus: A pilot mixed-methods study. *Frontiers in Psychology*, 11, 589461.
- Kan, K. H. (2021). Zoom in on the Get-in-Touch Project and Travel-Study to China. *International Journal of Education & the Arts*, 22(1), 1-26.
- Kędra, J., & Žakevičiūtė, R. (2019). Visual literacy practices in higher education: what, why and how?. *Journal of Visual Literacy*, 38(1-2), 1-7.
- Kennedy, J., & Pek, S. (2023). Mini-publics, student participation, and universities' deliberative capacity. *Studies in Higher Education*, 48(1), 63-82.
- Khasawneh, M. A. S. (2021). Cognitive flexibility of students with learning disabilities in English language and its relationship to some variables. *Shanlax International Journal of Education*, 9(3), 49-56.
- Kim, D., & Li, M. (2021). Digital storytelling: Facilitating learning and identity development. *Journal of Computers in Education*, 8, 33-61.
- Kim, J. (2020). Learning and teaching online during Covid-19: Experiences of student teachers in an early childhood education practicum. *International Journal of Early Childhood*, 52(2), 145-158.
- Kimmons, R., Graham, C. R., & West, R. E. (2020). The PICRAT model for technology integration in teacher preparation. *Contemporary Issues in Technology and Teacher Education*, 20(1), 176-198.
- Knapp, C. N., Reid, R. S., Fernández-Giménez, M. E., Klein, J. A., & Galvin, K. A. (2019). Placing transdisciplinarity in context: A review of approaches to connect scholars, society and action. *Sustainability*, 11(18), 4899.
- Koziel, S., & Pietrenko-Dabrowska, A. (2023). On nature-inspired design optimization of antenna structures using variable-resolution EM models. *Scientific Reports*, 13(1), 8373.
- Lähdesmäki, T., & Koistinen, A. K. (2021). Explorations of linkages between intercultural dialogue, art, and empathy. In *Dialogue for intercultural understanding: Placing cultural literacy at the heart of learning* (pp. 45-58). Cham, Switzerland: Springer.
- Lami, I. M., & Mecca, B. (2020). Assessing social sustainability for achieving sustainable architecture. *Sustainability*, 13(1), 142.
- Lee, W. H., & Lin, Y. H. (2020). Online communication of visual information: Stickers' functions of self-expression and conspicuousness. *Online information review*, 44(1), 43-61.
- Lee, Y. F., Lin, C. J., Hwang, G. J., Fu, Q. K., & Tseng, W. H. (2021). Effects of a mobile-based progressive peer-feedback scaffolding strategy on students' creative thinking performance, metacognitive awareness, and learning attitude. *Interactive Learning Environments*, 31(5), 2986-3002.
- Li, C. (2019). Metaphors and dehumanization ideology. *Chinese Semiotic Studies*, 15(3), 349-377.
- Li, L. (2023). Reform and innovation in Guzheng education teaching model. *Journal of Education and Educational Research*, 3(2), 13-16.
- Li, P., Fang, Z., & Jiang, T. (2022). Research Into improved Distance Learning Using VR Technology. *Frontiers in Education*, 7, 757874.
- Li, S., & Roshan, S. (2019). The associations between working memory and the effects of four different types of written corrective feedback. *Journal of Second Language Writing*, 45, 1-15.
- Li, T., Higgins, J. P. T., & Deeks, J. J. (2019). Collecting data. In *Cochrane handbook for systematic reviews of interventions* (pp. 109-141). Chichester, UK: John Wiley & Sons.
- Li, Y. (2020). Calligraphy Education in Teaching Chinese as a Second Language. In *The Palgrave Handbook of Chinese Language Studies* (pp. 1-29). Singapore: Palgrave Macmillan.
- Lim, F. V., & Unsworth, L. (2023). Multimodal composing in the English classroom: Recontextualising the curriculum to learning. *English in Education*, 57(2), 102-119.

- Lin, L. (2020). The visible hand behind study-abroad waves: Cram schools, organizational framing and the international mobility of Chinese students. *Higher Education*, 79, 259-274.
- Liu, C., & Song, X. (2023). Impact of traditional dresses on education and sense of patriotism through intervening effect of cultural awareness. *Educational Administration: Theory and Practice*, 29(1), 238-255.
- Liu, X., Zhu, W., & Seong, D. S. (2023). Exploring the influence of art teachers' core quality improvement on students' learning motivation and educational policy: Empirical evidence based on Chinese Universities. *Educational Administration: Theory and Practice*, 29(3), 48-68.
- Liu, Z., & Cui, D. (2023). Permeable Educational Learning Environments: The Impact of the Space Environment Fosters Student Learning and Engagement. *Educational Administration: Theory and Practice*, 29(1), 221-237.
- Lo, M. L. (2022). Nourishing our mind through the practice of Yangxin painting: Strategies in Chinese art for the digital generation. In *Teaching Chinese Arts & Culture: Content, Context, and Pedagogy* (pp. 35-58). Viseu, Portugal: InSEA Publications.
- Louhapensang, C., & Noobanjong, K. (2021). Cultivations of cross-cultural experiences via a collaborative and cooperative approach for sustainable learning from communities in Si Satchanalai, Thailand. *Cogent Education*, 8(1), 2003959.
- Luo, N., & Guan, T. (2023). Exploring the benefits of culturally responsive art learning experience for rural chinese students. *International Journal of Art & Design Education*, 42(1), 192-208.
- Lv, C. (2023). *Return to China One Day: The Learning Life of Qian Xuesen* (pp. 1-31). Singapore: Springer Nature Singapore.
- Malik, K. M., & Zhu, M. (2023). Do project-based learning, hands-on activities, and flipped teaching enhance student's learning of introductory theoretical computing classes?. *Education and Information Technologies*, 28(3), 3581-3604.
- Marques, B., McIntosh, J., & Campays, P. (2021). Creative design studios: converting vulnerability into creative intensity. *International Journal of Innovation in Education*, 7(2), 102-121.
- Megri, A. C., Hamoush, S., Megri, I. Z., & Yu, Y. (2021). Advanced manufacturing online STEM education pipeline for early-college and high school students. *Journal of Online Engineering Education*, 12(2), 01-06.
- Miao, Y., Razaq, A., Adebayo, T. S., & Awosusi, A. A. (2022). Do renewable energy consumption and financial globalisation contribute to ecological sustainability in newly industrialized countries?. *Renewable Energy*, 187, 688-697.
- Mitton, J., & Murray-Orr, A. (2022). Exploring the connection between playfulness and learning: Making learning memorable in a culturally and economically diverse grade 5 classroom. *Thinking Skills and Creativity*, 43, 101005.
- Mshayisa, V. V. (2020). Students' perceptions of Plickers and crossword puzzles in undergraduate studies. *Journal of Food Science Education*, 19(2), 49-58.
- Nair, V., & Yunus, M. M. (2021). A systematic review of digital storytelling in improving speaking skills. *Sustainability*, 13(17), 9829.
- Ng, D. T. K., Luo, W., Chan, H. M. Y., & Chu, S. K. W. (2022). Using digital story writing as a pedagogy to develop AI literacy among primary students. *Computers and Education: Artificial Intelligence*, 3, 100054.
- Ng, O. L., Shi, L., & Ting, F. (2020). Exploring differences in primary students' geometry learning outcomes in two technology-enhanced environments: dynamic geometry and 3D printing. *International Journal of STEM Education*, 7, 1-13.
- Ng, O. L., & Tsang, W. K. (2021). Constructionist learning in school mathematics: Implications for education in the fourth industrial revolution. *ECNU Review of Education*, 6(2), 328-339.
- Oh, S. H. (2022). Seeing as worldmaking: Ten views of a lingbi rock and yogācārin epistemology in late Ming China. *Religions*, 13(12), 1182.
- Okada, T., Agata, T., Ishiguro, C., & Nakano, Y. (2020). Art appreciation for inspiration and creation. In *Multidisciplinary Approaches to Art Learning and Creativity* (pp. 3-21). Abingdon, UK: Routledge.
- Oleksiyenko, A., Blanco, G., Hayhoe, R., Jackson, L., Lee, J., Metcalfe, A., . . . Zha, Q. (2021). Comparative and international higher education in a new key? Thoughts on the post-pandemic prospects of scholarship. *Compare: A Journal of Comparative and International Education*, 51(4), 612-628.

- Pavlou, V. (2020). Art technology integration: digital storytelling as a transformative pedagogy in primary education. *International Journal of Art & Design Education*, 39(1), 195-210.
- Piipponen, O., & Karlsson, L. (2021). 'Our stories were pretty weird too'—Children as creators of a shared narrative culture in an intercultural story and drawing exchange. *International Journal of Educational Research*, 106, 101720.
- Poulova, P., Haider, S. A., Zeb, S., & Jin, X. (2023). Open access edited by. In *Understanding Leadership and Organizational Psychology in Higher Education Institutions* (pp. 81). Lausanne, Switzerland: Frontiers Media SA.
- Prestridge, S., Utami, L. P., & Main, K. (2021). A cross-cultural comparison: the socio-technical affordances of social media as a professional learning tool for teachers. *Teacher Development*, 25(5), 549-566.
- Prochner, I., & Godin, D. (2022). Quality in research through design projects: Recommendations for evaluation and enhancement. *Design Studies*, 78, 101061.
- Psoma, V., & Skordoulis, C. (2022). Describing the transition from STEM to STEAM by replicating a historical scientific instrument. In *Innovating STEM Education: Increased Engagement and Best Practices* (pp. 9). Champaign, US: Common Ground Research Networks.
- Qamar, F., Afshan, G., & Rana, S. A. (2023). Sustainable HRM and well-being: systematic review and future research agenda. *Management Review Quarterly*, 1-51. doi:10.1007/s11301-023-00360-6
- Qi, F., Fauzi, T. A., & Yahaya, S. R. (2023). Representing tradition: The construction of culturally-specific visual narratives in Chinese picture books and hand scroll paintings. *Journal of Early Childhood Literacy*. doi:10.1177/14687984231182263
- Qiao, H., Liu, V., & Chilton, L. (2022, 2022). Initial images: Using image prompts to improve subject representation in multimodal AI generated art. In *Proceedings of the 14th Conference on Creativity and Cognition* (pp. 15-28). New York, US: Association for Computing Machinery.
- Ramirez, T., Brush, K., Raisch, N., Bailey, R., & Jones, S. M. (2021, 2021). Equity in social emotional learning programs: A content analysis of equitable practices in PreK-5 SEL Programs. *Frontiers in Education*, 6, 679467.
- Ravshanovich, J. R. (2021). Formation of creative abilities of students by teaching the genre "landscape" of fine arts. *International Journal of Academic Pedagogical Research (IJAPR) ISSN*, 2643-9123. Retrieved from https://api.scienceweb.uz/storage/publication_files/150/4031/6377afcd7c25c___9-Article%20Text-3-9-10-202209.pdf
- Reynolds, B. L., & Yu, M. H. (2021). A language course to teach administrative staff English for communication in an international university. *Education as Change*, 25(1), 1-29.
- Ritella, G., & Loperfido, F. F. (2021). Students' self-organization of the learning environment during a blended knowledge creation course. *Education Sciences*, 11(10), 580.
- Saris, B. (2020). A review of engagement with creativity and creative design processes for visual communication design (VCD) learning in China. *International Journal of Art & Design Education*, 39(2), 306-318.
- Saunders, J. (2021). *Back to the drawing board?: exploring process drawing and pathways to drawing participation in higher education for graphic design students* (Doctoral dissertation, Western Sydney University, New South Wales, Australia). Retrieved from <https://researchdirect.westernsydney.edu.au/islandora/object/uws:65447/datastream/PDF/view>
- Schiavio, A., Biasutti, M., & Antonini Philippe, R. (2021). Creative pedagogies in the time of pandemic: A case study with conservatory students. *Music Education Research*, 23(2), 167-178.
- Sharma, G. V. S. S., & Kumar, S. (2023). Thinking through art—A creative insight into mechanical engineering education. *Thinking Skills and Creativity*, 49, 101341.
- Shiau, H. C. (2020). Performing Chineseness, Translated histories: Taiwanese cartoonist Chen Uen's ink-brush comic aesthetics and digital pedagogy. *Critical Arts*, 34(5), 55-71.
- Shin, R., & Yang, X. (2021). Culturally responsible approach to teaching east asian art in the classroom. *Journal of Cultural Research in Art Education*, 38(1), 122-138.
- Siahaan, A., Wijaya, C., Ananda, R., Rohman, F., & Manurung, O. (2023). Islamic Education Management: A Study of Multicultural Paradigm. *Educational Administration: Theory and Practice*, 29(1), 12-28.
- Simamora, R. M. (2020). The Challenges of online learning during the COVID-19 pandemic: An essay analysis of performing arts education students. *Studies in Learning and Teaching*, 1(2), 86-103.

- Solikhah, I., & Budiharso, T. (2019). Investigating the learning outcomes of an INQF-based English language teaching curriculum in Indonesia. *Journal of Social Studies Education Research, 10*(4), 153-175.
- Sotiriadou, P., Logan, D., Daly, A., & Guest, R. (2020). The role of authentic assessment to preserve academic integrity and promote skill development and employability. *Studies in Higher Education, 45*(11), 2132-2148.
- Spiegelaar, N. (2023). Sustainability pedagogy: Understanding, exploring and internalizing nature's complexity and coherence. *Frontiers in Psychology, 13*, 7187.
- Sui, G. (2019). Reverse Ekphrasis: Teaching Poetry - inspired Chinese Brush Painting Workshops – in English. *International Journal of Art & Design Education, 38*(1), 125-136.
- Sukornyk, N. L., & Smale, W. T. (2020). Change, challenge, and complexity in the college curriculum. *Asian Research Journal of Arts & Social Sciences, 12*(3), 1-12.
- Sulaiman, T., Rahim, S. S. A., Wong, K., & Jaafar, W. M. W. (2021). The use of “scratch and challenge board” as an alternative assessment tool to enhance university students' skills. *Asian Journal of University Education, 17*(3), 85-98.
- Sun, M., Wang, M., & Wegerif, R. (2019). Using computer-based cognitive mapping to improve students' divergent thinking for creativity development. *British Journal of Educational Technology, 50*(5), 2217-2233.
- Sun, X. (2022). The teaching practice of curriculum ideology and politics in the teaching of professional courses in colleges and universities—take the course " packaging structure design" as an example. *Journal of Education and Development, 6*(3), 28.
- Sung, Y. L. (2022). Decolonising cinematography education: Experimenting with lighting ratios and textures for black and Asian skin tones. *Film Education Journal, 5*(2), 114-135.
- Sutimin, L. A., & Musadad, A. A. (2023). Nationalism in education: Redesigning the effectiveness of thematic e-books in virtual learning to grow student nationalism in Indonesia. *Educational Administration: Theory and Practice, 29*(2), 1-14.
- Tai, K. H., Hong, J. C., Tsai, C. R., Lin, C. Z., & Hung, Y. H. (2022). Virtual reality for car-detailing skill development: Learning outcomes of procedural accuracy and performance quality predicted by VR self-efficacy, VR using anxiety, VR learning interest and flow experience. *Computers & Education, 182*, 104458.
- Tang, C., Mao, S., Naumann, S. E., & Xing, Z. (2022). Improving student creativity through digital technology products: A literature review. *Thinking Skills and Creativity, 44*, 101032.
- Taylor, S. V., & Leung, C. B. (2020). Multimodal literacy and social interaction: Young children's literacy learning. *Early Childhood Education Journal, 48*, 1-10.
- Tomaszewski, L. E., Zarestky, J., & Gonzalez, E. (2020). Planning qualitative research: Design and decision making for new researchers. *International Journal of Qualitative Methods, 19*, 1609406920967174.
- Tomej, K., Liburd, J., Blichfeldt, B. S., & Hjalager, A. M. (2022). Blended and (not so) splendid teaching and learning: Higher education insights from university teachers during the Covid-19 pandemic. *International Journal of Educational Research Open, 3*, 100144.
- Trinidad, J. E., Raz, M. D., & Magsalin, I. M. (2021). “More than professional skills:” student perspectives on higher education's purpose. *Teaching in Higher Education, 28*(6), 1380-1394.
- Van den Beemt, A., MacLeod, M., Van der Veen, J., Van de Ven, A., Van Baalen, S., Klaassen, R., & Boon, M. (2020). Interdisciplinary engineering education: A review of vision, teaching, and support. *Journal of Engineering Education, 109*(3), 508-555.
- Varela, T., Palaré, O., & Menezes, S. (2020). The enhancement of creative collaboration through human mediation. *Education Sciences, 10*(12), 347.
- Victorino, G., Bandeira, R., Painho, M., Henriques, R., & Coelho, P. S. (2022). Rethinking the campus experience in a post-COVID world: A multi-stakeholder design thinking experiment. *Sustainability, 14*(13), 7655.
- Villanueva, G. (2022). You must learn: Sampling critical hip hop pedagogy in communication education spaces. *Pedagogy, Culture & Society, 30*(4), 435-453.
- Vue, R. (2021). Trauma and resilience in the lives and education of Hmong American students: Forging pedagogies of remembrance with critical refugee discourse. *Race Ethnicity and Education, 24*(2), 282-301.
- Wang, H. (2022). Daoist Creativity through Interconnectedness and Relational Dynamics in Pedagogy. *Philosophical Inquiry in Education, 29*(3), 183-196.

- Wang, Y. (2023). The application of Chinese traditional cultural graphic elements in the history of world modern design. *Indonesian Journal of Art and Design Studies*, 2(2), 158-165.
- Wang, Z., Pang, H., Zhou, J., Ma, Y., & Wang, Z. (2021). "What if... it never ends?": Examining challenges in primary teachers' experience during the wholly online teaching. *The Journal of Educational Research*, 114(1), 89-103.
- Wango, K. (2020). 'Painting with my students'—Development of subject matter and refinement of personal styles in selected paintings among fine art students at Kenyatta University. *East African Journal of Interdisciplinary Studies*, 2(1), 180-206.
- Wardaki, M. (2021). Rediscovering Afghan fine arts: The life of an Afghan student in Germany, Abdul Ghafur Brechna. *Modern Asian Studies*, 55(5), 1544-1580.
- Wass, R., Anderson, V., Rabello, R., Golding, C., Rangi, A., & Eteuati, E. (2020). Photovoice as a research method for higher education research. *Higher Education Research & Development*, 39(4), 834-850.
- Wenyong, F., & Hengtong, Z. (2022). Research on the display of city image in macau light and shadow festival. *International Journal of Arts and Humanities Studies*, 2(1), 17-21.
- Woon, C. C., Patron, E. C. P., & Boo, W. Q. (2022). The significance of 'absence-void space' in Chinese traditional painting. *Asian Journal of Arts, Culture and Tourism*, 4(3), 51-73.
- Wu, Y., Huang, C. W., & Chan, C. T. (2022). Experimenting and Integrating Ink Painting with Play in Early Childhood. In *Teaching Chinese Arts & Culture: Content, Context, and Pedagogy* (pp. 75). Viseu, Portugal: InSEA Publications.
- Xu, W., & Stahl, G. (2023). Teaching Chinese with Chinese characteristics: 'difficult' knowledge, discomforting pedagogies and student engagement. *Pedagogy, Culture & Society*, 31(1), 57-73.
- Xu, Y., & Shen, R. (2022). Aesthetic evaluation of Chinese calligraphy: a cross-cultural comparative study. *Current Psychology*, 42(27), 23096-23109.
- Yan, W. J., & Chiou, S. C. (2021). The safeguarding of intangible cultural heritage from the perspective of civic participation: The informal education of Chinese embroidery handicrafts. *Sustainability*, 13(9), 4958.
- Yan, Y., & Singh, M. K. M. (2023). On the Educational Theory and Application of Mobile-assisted Language Learning and Independent Learning in College English Teaching. *Educational Administration: Theory and Practice*, 29(3), 137-151.
- Yuan, R., Li, M., Peng, J., & Qiu, X. (2022). English-medium instruction (EMI) teachers as 'curriculum makers' in Chinese higher education: a textual analysis. *Journal of Multilingual and Multicultural Development*, 0, 1-16.
- Zeng, Z. (2020). Striving for the Third Space: An American professional's experiences in Chinese workplaces. In *The Third Space and Chinese Language Pedagogy* (pp. 68-98). Abingdon, UK: Routledge.
- Zhang, J., Miao, Y., Zhang, J., & Yu, J. (2020). Inkthetics: A comprehensive computational model for aesthetic evaluation of Chinese ink paintings. *IEEE Access*, 8, 225857-225871.
- Zhang, X. (2021). A study of the aesthetic thought and application of " virtual & real" in Chinese ink animation from strolling in aesthetics—a case study of feelings of mountains and waters. *Learning & Education*, 9(4), 145-147.
- Zhang, Y., & bin Mohamad Haris, M. F. (2022). Interpretation of Chen Gang's Creative Thinking in Violin Works and its Role in Cultivating Creative Thinking Ability in Violin Education. *Educational Administration: Theory and Practice*, 28, 91-101.
- Zhou, Y., & Zhou, Y. (2020). Institutionalization and identity of contemporary art (2000-Present). In *A History of Contemporary Chinese Art: 1949 to Present* (pp. 335-458). Singapore: Springer Singapore.
- Zhou, Y., & Zhou, Y. (2020). Truth, Virtue and Beauty: Art in the Post-Cultural Revolution (1977–1984). In *A History of Contemporary Chinese Art: 1949 to Present* (pp. 85-116). Singapore: Springer Singapore.
- Zhu, B., & Zhu, J. (2022). Application of intelligent image color technology in teaching Chinese painting color. *Security and Communication Networks*, 2022, 1-12.
- Zhu, W., Liu, X., & Seong, D. (2023). Educational innovation in higher education: Role of innovative competencies, learning environment, student readiness and ideological and political education. *Educational Administration: Theory and Practice*, 29(1), 178-197.
- Zhuang, X., Yao, Y., & Li, J. (2019). Sociocultural impacts of tourism on residents of world cultural heritage sites in China. *Sustainability*, 11(3), 840.

Appendix 1

Table 7. Publications Trend of Journals

Publisher	No of Publications
Education and Information Technologies	2
Visual Studies	1
Educational Administration: Theory and Practice	13
SAGE Open	2
Journal of Visual Literacy	1
Basic Education College Magazine For Educational and Humanities Sciences	1
Handbook of Artificial Intelligence in Education	1
Educational Technology Research and Development	1
International Journal of Educational Development	1
Routledge	3
Critique	1
Thinking Skills and Creativity	7
Second handbook of English language teaching	1
Journal of Aesthetic Education	1
International Journal of Research in Education and Science	1
Teaching Chinese Arts & Culture: Content, Context, and Pedagogy	4
Education Sciences	5
Computers & Education	2
Journal of Hospitality, Leisure, Sport & Tourism Education	1
Open Journal for Studies in Arts	1
Journal of Engineering Education	3
Sustainability	10
Educational Action Research	1
Teaching and Teacher Education	1
Advances in Educational Technology and Psychology	1
Educational Psychologist	1
Educational Psychology Review	1
Language Teaching Research	1
Xu Bing: Beyond the Book from the Sky	1
Journal of Contemporary Educational Research	1
N/A	4
Educational Research Review	1
Review of General Psychology	1
International Journal of Educational Technology in Higher Education	1
The International Encyclopedia of Art and Design Education	1
Teachers College Record	1
International Journal of Technology and Design Education	1
Educational assessment, evaluation and accountability	1
Journal of Early Childhood Teacher Education	1
Plos one	2
Open Journal of Philosophy	1
International Journal of Educational Research Open	2
Asian Studies Review	1
Asia Pacific Journal of Education	1
British Journal of Educational Technology	2
Authentic Chinese Educational Thought: Selected Works of Li Bingde, Lu Jie	1
Frontiers in Psychology	2
International Journal of Education & the Arts	1
Taylor & Francis	1
Studies in Higher Education	2
Shanlax International Journal of Education	1

Publisher	No of Publications
Journal of Computers in Education	1
International Journal of Early Childhood	1
Contemporary Issues in Technology and Teacher Education	1
Scientific Reports	1
Dialogue for intercultural understanding: Placing cultural literacy at the heart of learning	1
Online information review	1
Interactive Learning Environments	1
Chinese Semiotic Studies	1
Journal of Education and Educational Research	1
Research Into improved Distance Learning Using VR Technology	1
Journal of Second Language Writing	1
Cochrane handbook for systematic reviews of interventions	1
The Palgrave Handbook of Chinese Language Studies	1
English in Education	1
Higher Education	1
Cogent Education	1
International Journal of Art & Design Education	4
Springer	1
International Journal of Innovation in Education	1
Journal of Online Engineering Education	1
Journal of Food Science Education	1
Computers and Education: Artificial Intelligence	1
International Journal of STEM Education	1
ECNU Review of Education	1
Religions	1
Compare: A Journal of Comparative and International Education	1
International Journal of Educational Research	1
Understanding Leadership and Organizational Psychology in Higher Education Institutions	1
Teacher Development	1
Design Studies	1
Innovating STEM Education: Increased Engagement and Best Practices	1
Journal of Early Childhood Literacy	1
International Journal of Academic Pedagogical Research	1
Education as Change	1
Music Education Research	1
Critical Arts	1
Journal of Cultural Research in Art Education	1
Studies in Learning and Teaching	1
Journal of Social Studies Education Research	1
Asian Research Journal of Arts & Social Sciences	1
Asian Journal of University Education	1
Journal of Education and Development	1
Film Education Journal	1
Early Childhood Education Journal	1
International Journal of Qualitative Methods	1
Teaching in Higher Education	1
Pedagogy, Culture & Society	2
Race Ethnicity and Education	1
Philosophical Inquiry in Education	1
Indonesian Journal of Art and Design Studies	1
The Journal of Educational Research	1
East African Journal of Interdisciplinary Studies	1
Modern Asian Studies	1
Higher Education Research & Development	1
International Journal of Arts and Humanities Studies	1

Publisher	No of Publications
Asian Journal of Arts, Culture and Tourism	1
Current Psychology	1
Journal of Multilingual and Multicultural Development	1
IEEE Access	1
Learning & Education	1
A History of Contemporary Chinese Art: 1949 to Present	2
Security and Communication Networks	1
Total	167