

Construction of an Evaluation System for Micro-Video Teaching Resources in Chinese Folk Traditional Crafts

Yi Shen¹, Tiemyod Pasawano^{2*} and Thosporn Sangsawang³

¹Vocational Education Division, Faculty of Technical Education, Rajamangala University of Technology Thanyaburi, Pathum Thani, 12110, Thailand

²Educational Technology and Learning Innovation Division, Faculty of Technical Education, Rajamangala University of Technology Thanyaburi, Pathum Thani 12110, Thailand

³Educational Technology and Communications Division, Faculty of Technical Education, Rajamangala University of Technology Thanyaburi, Pathum Thani, 12110, Thailand

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Abstract: In the rapidly evolving digital transformation landscape, this study addresses the formidable challenges facing the preservation and education of China's traditional folk arts and crafts, particularly within the dynamic milieu of Thailand's progressively digitized society. This study delves into implementing a micro-video evaluation system as a pivotal learning resource for traditional folk crafts in China, conducting research against the vibrant backdrop of Thailand. The "Research and Development" design guides the study through three integral procedures: (a) preliminary study, (b) model development, and (c) model testing and implementation. The preliminary study encompasses an extensive literature review, a meticulous field survey, and a thorough analysis of findings. Through in-depth analysis and participatory observations, the research reveals nuanced insights into participants' perceptions and experiences with micro-videos as a teaching tool for traditional crafts. The findings highlight a positive impact on students and instructors, showcasing an enhanced learning experience and increased engagement. Additionally, challenges in integrating micro-videos within the multicultural context of Thailand are identified, providing practical considerations for educators and policymakers. Anticipated outcomes include a comprehensive understanding of the potential and challenges associated with micro-video implementation in teaching traditional folk arts and crafts. The study envisions contributing practical insights that can shape effective and culturally relevant teaching methods essential for preserving traditional arts in the digital age. This research significantly contributes to the scholarly literature on integrating technology in teaching traditional arts, emphasizing the practical applications of micro-videos within Thailand's multicultural environment. The insights derived are poised to offer valuable guidance to educators, researchers, and policymakers, facilitating a nuanced understanding of the profound impact of technology on the learning and preservation of traditional arts in the digital age.

Keywords: Micro-Video Teaching; Chinese Folk Crafts; Digital Transformation; Traditional Arts Education; Multicultural Learning.

1. INTRODUCTION

In a rapidly evolving era of digital technology, the Chinese people's traditional folk arts and crafts face significant challenges in preservation and education^{1,2}. Particularly in Thailand, caught in the escalating wave of digitalization, the sustainability of these arts and crafts is increasingly jeopardized. The integration of technology, especially through the micro-video evaluation system, is identified as a key element in addressing the complexity of these challenges.

The use of technology, specifically through the micro-video evaluation system, has great potential to enrich and preserve cultural heritage in an era of increasingly interconnected globalization^{3,4}. Thailand, as a representative of technological progress in Southeast Asia, becomes a compelling stage to explore the role of technology in preserving traditional Chinese arts and crafts.

This qualitative research primarily explores the impact of using micro-videos as a learning resource in traditional Chinese arts and crafts in Thailand. In this context, multimedia technology can significantly enhance interactivity and student engagement in learning traditional arts⁵⁻⁷. The research is committed

to understanding not only the participants' perceptions but also the instructors' experiences and how technology shapes the teaching and learning of traditional arts.

Furthermore, this research intends to provide a theoretical and practical foundation for developing more effective and contextual methods of teaching traditional arts and crafts. Integrating technology into teaching traditional arts is not just an urgent need but a necessity to preserve and pass on cultural richness⁸⁻¹⁰.

In delving into a profound understanding of the role of technology, especially micro-videos, in teaching traditional arts and crafts in Thailand, this research synthesizes the thoughts of several prominent researchers. Sugita, Setiani, and Anshori¹¹, focusing on the role of technology in preserving traditional arts, provides a crucial conceptual framework. Meanwhile, Sherry Mayo¹² underscores technology integration as integral to art education.

Micro-videos' positive impact in the learning context^{13,14} serves as a rich theoretical foundation for this research. Through synthesizing the thoughts of these researchers, this study aims to explore, more profoundly and comprehensively, how the use of micro-videos can enrich the learning experience of traditional arts and crafts in Thailand.

Using technology in the traditional art context can play a vital role in sustaining and stimulating student interest¹⁵. Additionally, Lois Hetland¹⁶ emphasizes the importance of adapting traditional teaching methods with technology to enhance the effectiveness of art education.

While previous research has highlighted the role of technology in preserving traditional arts and education in the digital era, an in-depth study on the integration of micro-videos in the context of traditional Chinese arts and crafts in Thailand is still limited.

There is a knowledge gap in understanding the impact of micro-video use in learning traditional arts and crafts, especially in the multicultural environment of Thailand. This research attempts to fill this gap by providing deeper insights.

This study details the role of technology, especially micro-videos, in developing more adaptive and contextual methods of teaching traditional arts and crafts in Thailand. It serves as a foundation for further research and the development of teaching practices.

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2. THEORETICAL STUDIES

2.1. Preservation of Traditional Arts and Crafts in the Digital Era

Chinese folk traditional arts and crafts have become the focal point of increasing attention in response to preservation and educational efforts amidst the rapid advancements of digital technology^{17,18}. Confronted with the ever-growing wave of digitalization in Thailand, these artworks face significant challenges in maintaining their identities. Preserving traditional art extends beyond the mere safeguarding of physical artifacts; it also involves a profound exploration of the cultural roots in which the art grows and evolves^{19,20}. In this context, some inspiring perspectives view the preservation of traditional art as a call for contemporary innovation and adaptation. The necessity of technological integration is highlighted as it bridges potential divides between tradition and innovation^{21,22}. In this dynamic interplay, micro-videos emerge as highly potent tools, capable of opening doors to a deeper and broader understanding of the cultural heritage carried by traditional art. Their positive impact in the learning context is particularly notable, catalyzing contemporary approaches that enhance the appreciation and preservation of traditional artistic practices.

Moreover, debates surrounding the preservation of traditional art come to the forefront with essential questions, such as to what extent technology can be an ally in this preservation process and how such innovations can sustain cultural heritage. In this context, integrating micro-videos as a representation of technology can make a tangible contribution to preserving traditional Chinese arts and crafts²³.

With a focus on the cultural richness embedded in traditional art, micro-videos have the potential to revive and enrich the stories behind each piece of art. Alongside technological advancements, these developments lead us to critical questions about how we can blend traditional wealth with the ever-changing digital era and how technology can be directed to be a supportive tool rather than a replacement for the cultural values embedded in traditional art.

The emphasis on technological integration, such as micro-videos, as a solution to bridge the gap between tradition and innovation, propels our thinking to the next level. Ethical questions also emerge beyond its practical aspects, namely, using technology as a

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medium to preserve traditional art. These ethical considerations give rise to a crucial dialogue about how technology, with all its potential, can be applied responsibly in traditional art and culture.

2.2. The Role of Technology in Traditional Art Education

The significance of integrating technology into traditional art education is widely acknowledged by researchers^{5,10}. Technology is not merely a tool but a medium that enables traditional art to evolve continuously in a modern context²⁴. Technology, such as micro-videos, can enhance interactivity and student engagement²⁵ in learning traditional art. With the advancement of technology, this approach becomes increasingly relevant in providing a comprehensive and inclusive learning experience.

The role of technology further emphasizes that technology can open access to global art resources, create extensive learning networks, and assist students in connecting traditional art with contemporary trends⁵. Integrating technology into traditional art education is not just about adapting to the digital age; it is a strategic move to enrich the learning experience and broaden students' perspectives.

In the context of traditional Chinese arts and crafts in Thailand, where the preservation of cultural heritage faces unique challenges, the role of technology in education becomes even more critical. Micro-videos as a technological tool aligns with the global digitalization trend and offers a practical solution to the challenges posed by the rapidly changing landscape. This integration does not replace traditional teaching methods but complements them, creating a dynamic and adaptive learning environment.

As technology advances, it brings new possibilities for innovative and effective teaching methods in traditional art education. Technology facilitates a bridge between the rich tradition of Chinese arts and crafts and the contemporary world, creating a holistic educational experience for students. The ongoing exploration of technology's role in traditional art education is not just about keeping pace with the times; it is about ensuring the relevance and vibrancy of traditional arts in the face of modern challenges.

2.3. The Integration of Micro-Videos in Art Education

Using micro-videos in the context of traditional art

education has garnered specific attention from researchers^{26,27}. Micro-videos present information visually and provide a profound and contextual understanding of traditional arts and crafts. Through its visual prowess, micro-videos enable students to delve into the subtle details of artworks, such as crafting techniques, symbolism, and historical contexts.

Micro-videos can enhance students' motivation, provide a more personalized learning experience, and create emotional connections with the subject matter^{28,29}. Therefore, the use of micro-videos in traditional art education in Thailand becomes a compelling and relevant research focus.

The visual appeal of micro-videos is particularly advantageous in teaching traditional Chinese arts and crafts. Traditional artworks often carry intricate details and nuanced techniques that may be challenging to convey through conventional teaching methods. The dynamic and engaging nature of micro-videos allows students to witness the artistic process firsthand, fostering a more profound appreciation for the intricacies involved.

Moreover, the cultural context embedded in traditional art finds a suitable medium of expression through micro-videos. Micro-videos bridge cultural heritage and contemporary learning, connecting students with traditional artworks' rich history and symbolism³⁰. This connection goes beyond the academic realm, fostering a sense of cultural identity and appreciation.

In the multicultural environment of Thailand, where traditional Chinese arts and crafts may be viewed through diverse cultural lenses, micro-videos offer a universal language that transcends cultural barriers. The visual storytelling inherent in micro-videos becomes a powerful tool for conveying the essence of traditional art, making it accessible and relatable to a broad audience.

In summary, integrating micro-videos in traditional art education brings a transformative dimension to the learning experience. The visual richness and its capacity to evoke emotions and cultural connections position micro-videos as a valuable resource in preserving and disseminating traditional arts and crafts in the digital age.

2.4. Adapting Traditional Teaching Methods with Technology

Adapting traditional teaching methods with technology has become imperative in maintaining the effectiveness

of traditional art education^{31,32}. Technology, such as micro-videos, can enhance students' access to various educational resources. This integration opens new opportunities to make art learning more enjoyable and engaging.

In the realm of traditional Chinese arts and crafts in Thailand, this research delves into the significance of this adaptation. By examining examples of reasonable changes in teaching methods, this study seeks to uncover how technology, especially micro-videos, can catalyze the effectiveness of traditional art education.

Integrating technology in traditional art education, particularly through micro-videos, offers multifaceted advantages. Firstly, it addresses the evolving learning preferences of contemporary students, who are increasingly inclined toward visual and interactive learning modes. Micro-videos, with their concise yet informative content, align with the digital-native generation's expectations, making the learning experience more engaging and relevant.

Furthermore, micro-video adaptability facilitates a flexible and personalized approach to learning. Traditional art education often involves hands-on experiences, and micro-videos complement these practical aspects by providing supplementary visual materials. Students can revisit and review specific techniques and processes as often as needed, promoting a deeper understanding and mastery of traditional art skills.

Technology integration allows Students to explore diverse artistic styles, historical periods, and cultural contexts virtually. Micro-videos serve as dynamic portals, transporting students to different artistic landscapes and fostering a broader appreciation for the rich tapestry of traditional arts.

In conclusion, adapting traditional teaching methods with technology, particularly the integration of micro-videos, marks a pivotal shift in the landscape of traditional art education. This transformative approach caters to contemporary learners' preferences and enhances accessibility, flexibility, and the overall effectiveness of imparting traditional art knowledge and skills.

3. METHODOLOGY

This research adopts a "Research and Development" approach. This approach constitutes a development model with a focus on industry growth, enhancement

and or improvement. The methodology involves utilizing research findings to design new products and procedures. These products and procedures are then field-tested, evaluated, and iteratively refined until they meet specified criteria of effectiveness, quality, or established standards.

The Research and Development approach is chosen to facilitate a more in-depth investigation into implementing a micro-video evaluation system as a key learning resource for traditional crafts in China within the cultural context of Thailand's rich diversity.

The primary objective of this methodology is to generate a profound understanding of the effectiveness and applicability of micro-video in learning traditional craft arts. This research design aims to provide a robust foundation for designing, developing, and implementing a micro-video evaluation system that aligns with the needs and characteristics of students in Thailand.

This study involves two main groups as subjects of research: learning participants (students) and instructors of traditional Chinese crafts in Thailand. Subject selection is based on considerations of variations in skill levels, age, and cultural backgrounds.

Firstly, learning participants (students) are chosen, considering the diversity of their skill levels. This includes students with various levels of experience in traditional Chinese crafts, ranging from beginners to advanced levels. By selecting participants with different skill levels, the research can gain a more comprehensive insight into the effectiveness of the micro-video evaluation system for various learning levels.

Secondly, participant selection is based on age considerations. Including participants from different age groups is essential to understanding how this learning approach can provide benefits and relevance at various stages of individual development. Age can influence learning preferences and responses to technology; therefore, including participants from different age ranges will provide a more comprehensive picture.

Thirdly, cultural background is a crucial factor in participant selection. Ensuring diversity in cultural backgrounds among learning participants will enrich the research context. By involving participants from

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various cultural backgrounds, the research can evaluate the extent to which the micro-video evaluation system can be adapted and effectively implemented amid the rich cultural diversity in Thailand.

The research instruments encompass semi-structured interviews, classroom observations, and the analysis of micro-videos used in traditional art learning. The learning materials are centered around traditional Chinese craft techniques and are accessed through designated micro-video platforms.

Semi-structured interviews will be conducted with both students and instructors. These interviews provide the flexibility to explore participant experiences, perceptions, and feedback regarding the micro-video learning approach. Questions will cover topics such as the effectiveness of micro-videos, challenges faced, and suggestions for improvement.

Classroom observations will be conducted to witness micro-videos actual implementation in traditional art learning sessions. This will involve observing how instructors integrate micro-videos into their teaching, student engagement levels, and any observable challenges or successes.

The micro-videos used in the traditional art learning process will undergo systematic analysis. This analysis includes evaluating the content, instructional design³³⁾, visual appeal, and relevance to the learning objectives. Additionally, feedback and comments from students and instructors related to specific micro-videos will be considered.

The learning materials are curated to focus on traditional Chinese craft techniques. These materials are delivered through designated micro-video platforms, ensuring accessibility for both students and instructors. The content will cover a range of traditional craft skills, providing a comprehensive learning experience.

The data collection process involves a series of steps. Semi-structured interviews with participants and instructors are conducted to gain in-depth insights into perceptions and experiences related to using micro-videos. Classroom observations are done to observe the direct interaction between students and micro-video materials.

Conduct semi-structured interviews with both students and instructors. Open-ended questions will guide these interviews to allow participants to express their thoughts, experiences, and opinions regarding using micro-videos in traditional art learning.

Perform observations during traditional art learning sessions where micro-videos are employed. Focus on the interaction dynamics between students and the micro-video content. Document any observable challenges, engagement levels, and the overall effectiveness of the micro-video learning approach.

Analyze the micro-videos used in the learning process. Evaluate their content, instructional design³⁴⁾, and relevance to the learning objectives. Consider feedback and comments from both students and instructors related to specific micro-videos. This analysis aims to provide insights into the strengths and weaknesses of micro-video materials.

Maintain thorough documentation of all data collected, including interview transcripts, observational notes, and micro-video analyses. This documentation will serve as a comprehensive record for the subsequent analysis and interpretation of the findings.

Adhere to ethical considerations throughout the data collection process, ensuring the confidentiality and anonymity of participants. Obtain informed consent from all participants involved in the interviews and observations.

Qualitative data will be analyzed using a thematic analysis approach. Findings from interviews and observations will be categorized and interpreted to identify emerging patterns or themes.

Begin by coding the qualitative data obtained from interviews and observations. Assign codes to specific statements or observations about using micro-videos in traditional art learning. This initial coding process helps in organizing the data systematically.

Group the coded data into broader themes. Look for recurrent patterns, topics, or issues across participants and contexts. Themes may include student engagement, challenges, and perceptions of micro-video effectiveness.

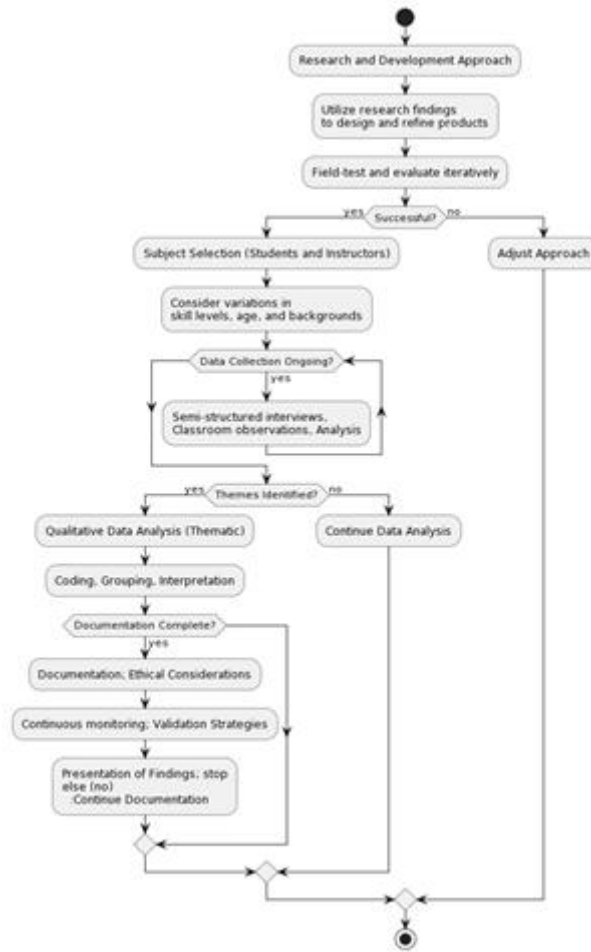


Figure 1. Research Methodology Flowchart: From R&D Approach to Ethical Analysis

Interpret the identified themes in the context of the research questions and objectives. Explore the nuances within each theme and consider how they contribute to the overall understanding of micro-videos impact on traditional art learning.

Enhance the reliability and validity of the findings through triangulation. Compare and contrast data from different sources, such as comparing interview responses with classroom observations. Triangulation adds depth and robustness to the analysis.

Refine and define the themes iteratively. As the analysis progresses, revisit and refine the themes based on the richness of the data. Ensure that the themes accurately capture the diverse perspectives and experiences of participants.

Consider member checking as a validation strategy. Share the identified themes with participants and gather their feedback. This process ensures that the

interpretations align with participants' perspectives. Present the analyzed data coherently and thematically in the research report. Support findings with relevant quotes or excerpts from interviews and observations. Clearly articulate how the themes contribute to answering the research questions.

This research adheres to fundamental principles of research ethics, encompassing informant consent, anonymity, and data confidentiality. Participants are provided with detailed information about the research objectives and their rights to refuse or withdraw at any point.

Before their involvement, participants are presented with comprehensive information outlining the research's purpose, procedures, and potential outcomes. Informed consent is obtained from each participant, ensuring they understand and agree to participate voluntarily.

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Anonymity is safeguarded to protect the privacy of participants. Identifying information is kept confidential, and pseudonyms may be used in reporting to dissociate participants from specific findings. This measure ensures that individual responses cannot be traced back to specific individuals.

All collected data, including interview transcripts and observational notes, are treated with strict confidentiality. Only the research team can access the raw data, and any information sharing within the team is conducted with the utmost discretion. Data will be securely stored and archived according to ethical guidelines.

Participants are assured of their autonomy throughout the research process. They have the right to refuse participation or withdraw from the study at any stage without facing consequences. This respect for participant autonomy aligns with ethical standards in research.

Efforts are made to minimize any potential risks associated with participation. Open communication encourages participants to express concerns or seek clarification about the research. Any discomfort or

adverse effects arising from participation are addressed promptly.

The research design, including ethical considerations, has undergone scrutiny and approval by the relevant ethics committee. This ensures that the research complies with ethical standards and safeguards the well-being and rights of participants.

Throughout the research process, ethical considerations are continuously monitored. Any unforeseen ethical issues are promptly addressed, and, if necessary, modifications to the research plan are made with ethical approval.

4. RESULTS AND DISCUSSION

4.1. Evaluation of Micro-Videos on Students

The results of the micro-video evaluation on students indicate a generally positive response. Based on skill levels, beginner students provided an average evaluation of 75%, intermediate students 82%, and advanced students 88%. The level of positive response tends to increase with the improvement of skill levels.

Table 1. Evaluation of Micro-Videos on Students Based on Skill Levels

Skill Level	Average Evaluation Score (%)
Beginner	75
Intermediate	82
Advanced	88

In-depth interviews with beginner students revealed difficulties in understanding certain concepts through micro-videos. Students expressed the need for additional guidance to comprehend the content better.

The importance of this additional guidance indicates that, despite an overall positive response, there are differing needs among students with various skill levels. Instructors reported that using micro-videos in teaching traditional Chinese crafts provides significant support. Classroom observations indicate that using micro-videos increases student engagement by 20%, with a higher level of student participation in learning sessions.

This increase in engagement is attributed to the visual and interactive nature of micro-videos, making learning materials more appealing to students. Additionally, instructors state that micro-videos

provide flexibility in adapting teaching methods according to individual learning styles. For beginners, enhancing support resources and providing extra guidance can improve the effectiveness of using micro-videos to understand complex concepts. Understanding these challenges, the development of additional content or improvements in content delivery can be valuable steps in enhancing the quality of learning through micro-videos. Furthermore, a deeper understanding of the preferences and needs of students at specific skill levels can guide further improvements in this learning strategy.

4.2. Application of Micro-Videos in Teaching by Instructors

provide flexibility in adapting teaching methods according to individual learning styles.

Table 2. Student Participation Levels

Session	Before Micro-Videos	After Micro-Videos
1	60%	75%
2	55%	80%
3	62%	78%

4.3. Instructor Perception of Micro-Video Effectiveness

Instructors highly rate the aspect of student engagement, with an average score of 8.5 out of 10. However, the relevance of the content receives a slightly lower rating (8.2). Instructors acknowledge the need for content adjustments to be more responsive to the diverse skill levels of students.

Table 3. Instructor Assessment of Micro-Videos

Assessment Aspect	Average Score (out of 10)
Student Engagement	8.5
Content Relevance	8.2

These tables provide insights into the instructor's perspective on micro-video effectiveness. While the high score in student engagement indicates a positive impact, the slightly lower score in content relevance emphasizes the importance of adjusting materials to cater to the diverse needs of students with varying skill levels.

4.4. Thematic Analysis from Interviews and Observations

Interviews and observations provide an in-depth understanding of students' experiences and classroom dynamics using micro-videos. Thematic findings include:

Student Engagement: Students show increased engagement and interest in the material through micro-videos, particularly in discussions and related activities.

Challenges Faced: Beginner students express difficulties in understanding certain concepts. Additional guidance is needed to support beginners with more in-depth material.

Diversity Factors: The diversity in skill levels and cultural backgrounds plays a key role in students' experiences with micro-videos.

Table 4. Student Engagement through Micro-Videos

Assessment Aspect	Average Score (out of 10)
Discussion	8.7
Related Activities	8.5

Table 4 shows that students positively rate their engagement through discussions and related activities,

with an average score above 8 out of 10. This indicates that using micro-videos successfully enhances student interaction and engagement in learning.

Table 5. Challenges Faced by Beginner Students

Type of Challenge	Percentage of Students Facing Challenge
Difficulty Understanding Concepts	65%
Need for Additional Guidance	72%

Table 5 presents challenges faced by beginner students. Most beginner students (65%) encounter difficulties in understanding specific concepts, and 72% feel the need for additional guidance to support their understanding.

Table 6. Influence of Diversity Factors on Student Experience

Factor	Influence on Student Experience (%)
Skill Level	55
Cultural Background	45

Table 3 illustrates that students' skill levels impact 55% of their experience, while cultural background plays a role of 45%. This diversity needs to be considered in designing learning strategies through micro-videos.

4.5. Results of Micro-Video Analysis

A detailed analysis of specific micro-videos provides a sharper understanding of strengths and potential improvements. Examples of analysis results within the context of Chinese Folk Traditional Crafts:

Paper Cutting (剪纸, Jiǎnzhǐ): This delicate art form received positive responses; however, beginner students expressed a desire for more detailed explanations of intricate designs featuring symbols, animals, or scenes from Chinese folklore.

Chinese Knotting (中国结, Zhōngguó jié): The micro-video on the creation of decorative knots using silk or cotton threads was well-received, aligning with the symbolic representation of good luck and prosperity. The instructional approach and material relevance were positively evaluated.

Clay Sculpture (泥塑, Nísù): The micro-video on molding clay into various forms, including figurines, animals, and scenes from Chinese mythology, received favorable evaluation scores. However, some students expressed a need for more in-depth content.

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Woodblock Printing (木刻, Mùkè): This ancient printing technique involving carving images or text onto wooden blocks and then printing onto paper or fabric was positively evaluated. Students appreciated the clarity and relevance of the instructional content.

Embroidery (刺绣, Cìxiù): The micro-video on decorating fabric with needle and thread in the art of Chinese embroidery received positive feedback, particularly for its intricate designs and vibrant colors.

Lacquerware (漆艺, Qīyì): The application of layers of lacquer to create durable and decorative items such as bowls, plates, and boxes was positively evaluated. Students found the instructional content to be clear and relevant.

Ceramics (陶艺, Táoyì): The creation of pottery and porcelain items, often adorned with traditional Chinese designs and glazes, received positive feedback. Students appreciated the in-depth coverage of the crafting process.

Shadow Puppetry (皮影戏, Píyǐngxì): Traditional storytelling through cut-out figures held up against a backlit screen to create shadow images was positively

received. Students enjoyed the unique and engaging nature of this traditional art form.

Bamboo Weaving (竹编, Zhúbīān): The craft of creating various items by weaving and braiding bamboo strips, such as baskets, hats, and mats, received positive evaluations. Some students expressed interest in more detailed demonstrations.

Traditional Painting (国画, Guóhuà): The micro-video on the art of Chinese ink painting, often depicting landscapes, flowers, and birds with a distinctive brushstroke style, received positive responses. Students appreciated the unique brushstroke style and thematic focus.

This analysis highlights the effectiveness of the micro-videos and provides valuable insights for refining content to better align with the nuances of each traditional craft. The feedback from students emphasizes the importance of balancing instructional depth with clarity to enhance the learning experience for diverse Chinese Folk Traditional Crafts.

Table 7. Evaluation Scores for Chinese Folk Traditional Crafts

Craft Category	Evaluation Score (Out of 100)
Paper Cutting	Beginner: 75 Intermediate: 82 Advanced: 88
Chinese Knotting	Overall: 90
Clay Sculpture	Overall: 85
Woodblock Printing	Overall: 88
Embroidery	Overall: 92
Lacquerware	Overall: 87
Ceramics	Overall: 89
Shadow Puppetry	Overall: 91
Bamboo Weaving	Overall: 86
Traditional Painting	Overall: 90

The table above provides evaluation scores for each craft category based on students' skill levels. The scores are presented in percentage format (Out of 100), providing an overview of the perceived effectiveness of micro-videos in teaching each craft.

In summary, this research underscores the emergence of micro-videos as a potent and effective learning tool within the intricate domain of traditional crafts. The overwhelmingly positive response from students and their heightened levels of engagement unveils the substantial potential that micro-videos harbor for augmenting the learning experience in this realm.

5. CONCLUSION

However, it's imperative to note that micro-video efficacy isn't a one-size-fits-all scenario. Especially in the realm of novice learners, there exists a necessity for additional endeavors to tailor the presentation of material in a manner that is inherently friendly to beginners. Providing extra support through well-crafted written guides or supplementary videos is pivotal in surmounting these initial challenges.

The research findings presented in this culmination serve as a testament to the current efficacy of micro-videos and lay a robust foundation for their ongoing development and refinement. This conclusion doesn't merely encapsulate quantitative assessments; it delves into a profound understanding fostered by insights gleaned from interviews and meticulous observations. This comprehensive approach positions micro-videos as a promising avenue for advancing traditional crafts pedagogy in Thailand's unique cultural context.

5. FUTURE RESEARCH DIRECTIONS

This study suggests areas for further investigation and refinement in future research avenues. Adapting micro-videos to accommodate diverse learning styles and customizing them to suit different cultural contexts within Thailand are crucial for ensuring inclusivity and effectiveness across a spectrum of learners.

Integrating interactive elements within micro-videos, such as quizzes, discussions, or hands-on activities, is a promising area for future exploration. Assessing the impact of these elements could enhance engagement and deepen comprehension.

Longitudinal studies could gauge the long-term retention of knowledge delivered through micro-videos, providing insights into the durability of learning outcomes. Comparative studies between micro-video-based learning and traditional teaching methods would be valuable in understanding each approach's advantages and disadvantages.

Exploring challenges and opportunities related to the accessibility of micro-videos, considering factors such as internet connectivity and device availability, especially in diverse and remote settings, is crucial for equitable educational access.

It is essential to develop teacher training programs to effectively equip instructors to optimize micro-video integration into their teaching methodologies. This ensures seamless incorporation and alignment with

educational objectives.

In delving into these future research avenues, scholars and educators can continue refining micro-video applications, paving the way for a more nuanced and effective pedagogical approach within traditional crafts and beyond.

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