National Kaohsiung University of Science and Technology, Department of English

Taiwan Culture and Sustainable Development: The 2nd AI Visual Creation Postcard Design Competition Implementation Rules

1. Purpose and Objectives of the Competition

With the rapid development of digital technology and artificial intelligence (AI), there is a growing global demand for professionals who integrate technological innovation with humanistic literacy, particularly in promoting sustainable development. The Executive Yuan's National Council for Sustainable Development is dedicated to advancing Taiwan's sustainable development goals and has formulated guidelines that cover core objectives in areas such as environmental protection, economic development, and social equity. How to leverage the power of digital technology to preserve and promote local culture while achieving sustainable development has become a critical issue that cannot be overlooked.

Against this backdrop, exploring how technological innovation can be applied to promote sustainable development while simultaneously enhancing the preservation and promotion of local culture has become a global trend. In the face of global challenges such as climate change, resource scarcity, and environmental protection, the concept of sustainable development has become increasingly vital. The innovative applications in the field of digital humanities provide new perspectives to address these challenges.

Building on the success of the first competition, the Department of English at National Kaohsiung University of Science and Technology is once again organizing the "**Taiwan Culture and Sustainable Development: The 2nd AI Visual Creation Postcard Design Competition**" (hereafter referred to as this competition) in the first semester of the 113th academic year. The aim of this competition is to enhance participants' awareness of Taiwan's sustainable development goals and to inspire them to express their creativity using English and digital skills.

Participants will use AI to generate images that showcase Taiwan's cultural characteristics and reflect the concept of sustainable development, presenting their creations in the form of postcards based on English prompts. Through the integration of AI technology and creative thinking, the competition seeks to ignite participants'

passion for Taiwan's culture and sustainable development, encouraging them to articulate the meaning behind their work in English. We hope that each submission will reflect participants' keen observations and innovative thinking regarding the challenges of Taiwan's sustainable development, while painting a hopeful blueprint for Taiwan's sustainable future.

2.   Submission and Competition Information

2.1 Eligibility

The competition is open to students from all colleges and universities across Taiwan, welcoming participants from every department. Each team may consist of one to two students.

2.2 Advisor (Optional)

This competition warmly invites teachers to join hands with students in exploring the challenges and directions of effort that Taiwanese culture faces in sustainable development. Together, participants are encouraged to unleash their creativity to envision future blueprints and integrate these ideas into postcard designs. Additionally, participants should describe the meaning and inspiration behind their works in English. Advising teachers may guide multiple teams, but each team is limited to just one advisor.

2.3 Competition Theme

This competition focuses on the comprehensive application of understanding Taiwanese culture and sustainable development and the ability to narrate in English. Centered around "Text-to-Image Creation and Narration," participants are required to use advanced image-generating AI tools combined with professional English descriptions to create images that reflect specific themes. These themes include issues related to Taiwanese culture elements (TCEs) and the sustainable development goals (SDGs). Through this competition, we aim to comprehensively enhance the professional literacy of participating students in the digital humanities field, as well as improve their language expression, humanistic concern, and creative thinking abilities.

SDGs	Description
No Poverty (SDG 1)	Aimed at eradicating poverty in all its forms worldwide.
Zero Hunger (SDG 2)	Endeavors to end hunger, achieve food security, improve nutrition, and promote sustainable agriculture.
Good Health and Well-being (SDG 3)	Ensures healthy lives and promotes well-being for all at all ages.

Quality Education (SDG 4)	Ensures inclusive and equitable quality education and promotes lifelong learning opportunities for all.
Gender Equality (SDG 5)	Achieves gender equality and empowers all women and girls.
Clean Water and Sanitation (SDG 6)	Ensures access to clean water and sanitation for all.
Affordable and Clean Energy (SDG 7)	Ensures access to affordable, reliable, sustainable, and modern energy for all.
Decent Work and Economic Growth (SDG 8)	Promotes sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all.
Industry, Innovation, and Infrastructure (SDG 9)	Builds resilient infrastructure, promotes inclusive and sustainable industrialization, and fosters innovation.
Reduced Inequalities (SDG 10)	Reduces inequalities within and among countries.
Sustainable Cities and Communities (SDG 11)	Makes cities and human settlements inclusive, safe, resilient, and sustainable.
Responsible Consumption and Production (SDG 12)	Ensures sustainable consumption and production patterns.
Climate Action (SDG 13)	Takes urgent action to combat climate change and its impacts.
Life Below Water (SDG 14)	Protects and sustainably uses the oceans, seas, and marine resources for sustainable development.
Life on Land (SDG 15)	Protects, restores, and promotes sustainable use of terrestrial ecosystems, sustainably manages forests, combats desertification, and halts and reverses land degradation and biodiversity loss.
Peace, Justice, and Strong Institutions (SDG 16)	Promotes peaceful and inclusive societies for sustainable development, provides access to justice for all, and builds effective, accountable, and inclusive institutions at all levels.
Partnerships for the Goals (SDG 17)	Strengthens the means of implementation and revitalizes the global partnership for sustainable development.

TCEs	Description
Traditional Festivals and Rituals (TCE 1)	Celebrating Taiwan's diverse festivals and rituals that mark the lunar calendar and local traditions, such as Lunar New Year, Dragon Boat Festival, and Mid-Autumn Festival.
Indigenous Cultures (TCE 2)	Preserving and promoting the languages, traditions, and arts of Taiwan's indigenous peoples, recognizing their unique contributions to national identity.
Culinary Diversity (TCE 3)	Embracing a wide range of foods and cooking styles that reflect Taiwan's ethnic diversity and historical influences, from street snacks to high-end restaurants.
Language and Literature (TCE 4)	Encouraging the use and appreciation of Taiwanese languages

	(including Mandarin, Taiwanese Hokkien, Hakka, and indigenous languages) and literature reflecting Taiwan's history and contemporary stories.
Arts and Crafts (TCE 5)	Supporting traditional and contemporary arts, including calligraphy, painting, ceramics, and textile arts, which reflect Taiwan's aesthetic heritage and innovative spirit.
Environmental Protection (TCE 6)	Promoting the protection of Taiwan's natural landscapes and biodiversity, recognizing the island's rich ecological resources and the importance of sustainable tourism.
Historical Preservation (TCE 7)	Protecting historical sites and architectural heritage, including temples, traditional residences, and colonial-era buildings, to maintain a connection with Taiwan's past.
Modern Technology and Innovation (TCE 8)	Highlighting Taiwan's achievements in technology and innovation, while exploring how these advancements coexist harmoniously with traditional practices and sustainable development.
Social Harmony and Inclusion (TCE 9)	Fostering a society that values diversity, inclusivity, and equality, reflecting Taiwan's multicultural identity and commitment to social welfare.
Public Health and Welfare (TCE 10)	Prioritizing the public health system and promoting traditional and modern health practices, such as Chinese medicine, yoga, and naturopathy, as well as enhancing awareness of health and welfare among all citizens.
Education and Lifelong Learning (TCE 11)	Valuing education and the pursuit of knowledge, from traditional culture and language learning to technology and innovation, as a foundation for personal growth and societal progress.
Community Engagement and Volunteering (TCE 12)	Encouraging active participation in community life and volunteer service, reflecting the Taiwanese spirit of mutual assistance.

2.4 Call for Submissions Period and Method

a. Call for Submissions Period: From September 25, 2024, to **November 27, 2024, 23:00**. Late submissions will not be accepted.

b. Method of Submission: Submissions must be completed online via a Google Form. If a competition team consists of two students, only one form needs to be filled out.

2.5 Event Organizer and Contact Information

a. Organizer: Department of English, National Kaohsiung University of Science and Technology

b. Co-organizer: College of Foreign Languages, National Kaohsiung University of Science and Technology

c. Advisory Organization: MOE Talent Cultivation Project for Digital Humanities

d. Competition Contact Person: Bo-Ren Mau
   - E-mail: brnmau@nkust.edu.tw

3 Submission Guidelines

Required Documents for Submission	Content
Personal Information Consent Form (Appendix 1)	Personal Information Consent Form (**must be signed by the participant**)
Copyright Property Rights Authorization Consent and Commitment Letter (Appendix 2)	Copyright Property Rights Authorization Consent and Commitment Letter (**must be signed by the participant**)
Postcard Entries	Two postcards, submitted in .png or .jpg format, with dimensions of 10.2 x 15.2 cm, and file size limited to 10 MB or less. Post-production is not allowed, except for size cropping. **First Postcard**: Illustrates the participant's observation of the challenges and shortcomings Taiwan faces in sustainable development. **Second Postcard**: Illustrates the participant's ideal blueprint for a sustainable Taiwan.
Information Related to the Work and AI Image Generation Software	Work title, AI image generation software, prompts, and work description, etc., to be filled out in the Google Form submission form.

Example:

AI Image Generation Software: Stable Diffusion
SDGs Theme: Sustainable Cities and Communities (SDG 11)
TCEs Theme: Environmental Protection (TCE 6), Historical Preservation (TCE 7)
First Postcard Prompt Envision a poignant scene that brings to light the adverse effects of irresponsible consumption and production on Taiwan's treasured historical buildings and sites. This scene reveals ancient temples and traditional Fujian-style houses surrounded by the detritus of modern life: plastic waste blown against their venerable walls, air thick with pollution darkening their once vibrant facades, and waterways choked with chemical runoff threatening the foundations of these cultural landmarks. The contrast between the enduring beauty of traditional architecture and the scars left by modern neglect serves as a stark reminder of the need for responsible consumption and production. Amidst this, signs of hope emerge through community-led restoration projects, employing eco-

friendly materials and sustainable practices to heal and protect these historical treasures. This image aims to awaken a sense of urgency and responsibility, encouraging viewers to advocate for and adopt more sustainable lifestyles to safeguard the cultural heritage that connects us to our past.

First Postcard

Second Postcard Prompt

Visualize a hopeful and engaging scene set in Taiwan, where the community comes together to champion the causes of Responsible Consumption and Production alongside Historical Preservation. This image captures the vibrant spirit of volunteers, young and old, actively participating in cleaning efforts, meticulously picking up garbage around ancient temples and traditional buildings, their hands gloved and bags filled with waste destined for recycling. Nearby, colorful recycling bins stand, neatly organized and labeled, showcasing a community committed to sustainability. In the heart of this bustling activity, skilled artisans conduct workshops on the restoration of cherished monuments, employing ancient techniques alongside modern, eco-friendly materials to breathe new life into these storied structures. Children gather around, engrossed in educational tours that highlight the importance of preserving cultural heritage through responsible living. Innovative art installations, created from recycled materials, adorn the pathways leading to these historic sites, serving as creative reminders of the beauty that can be forged from mindful consumption. The scene is warmly lit by energy-efficient lighting, casting a gentle glow on the faces of those who contribute their time and effort to protect and celebrate Taiwan's rich history and cultural identity. This image serves as an inspiration, urging viewers to engage in actions that support the preservation of historical buildings through sustainable practices, fostering a future where cultural heritage and environmental stewardship are inextricably linked.

Second Postcard

4 Evaluation Method and Rules

The scoring for this competition will integrate human judging and an automatic scoring system, combining these results through a weighted calculation method. Human scoring will be conducted by three senior judges from the digital humanities field, who will evaluate the two AI-generated postcards, image generation prompts, and the narrative descriptions according to the following criteria:

4.1 AI-Generated Images
- Theme Relevance: Whether the image clearly conveys the participant's observation of Taiwan's challenges and their ideal blueprint for sustainable development.
- Creativity: The image's innovation in visual expression and concept.

4.2 Image Generation Prompts
- Clarity: Whether the prompt is clear and specific, capable of accurately guiding the AI to generate the required image.
- Theme Appropriateness: Whether the prompt contains sufficient detail and instruction relevant to the participant's chosen theme to generate specific and theme-related images.

4.5 Work's English Narrative
- Language Accuracy: Correct use of grammar and vocabulary, language fluency, and the ability to effectively convey complex concepts and ideas in English.
- Thematic Exploration: Whether the narrative effectively explores the theme of the work, including underlying thoughts on Taiwanese culture and sustainable development.
- Expressive Creativity: The narrative's creativity and appeal in expressing the meaning and story of the images, and its ability to engage the reader.
- Cultural and SDG Awareness: Whether the narrative demonstrates an understanding and concern for Taiwanese culture and sustainable development through storytelling, emotional connection, or other creative techniques.

Additionally, the automatic scoring will utilize the CLIP Score algorithm to measure the similarity between the AI-generated images and the image generation prompts, as well as the relevance between the AI-generated images and the English narrative descriptions.

5 Competition Schedule

Event	Date	Description
Online Submission Opens	From September 25, 2024	Fill out the submission Google Form: https://forms.gle/FWKQu2gN3nmNpwAT9
Submission Deadline	**November 27, 2024, 23:00**	Late submissions will not be accepted.
Judging Period	December 4, 2024	
Announcement of Winners	December 18, 2024	Winners will be announced on the official website of the Department of English for the Talent Cultivation Project in Digital Humanities at National Kaohsiung University of Science and Technology: http://aidh2023.nkust.org/

6 Awards and Prizes

a. First Place: NT$5,000 book voucher, along with a certificate of award.
b. Second Place: NT$4,000 book voucher, along with a certificate of award.
c. Third Place: NT$3,000 book voucher, along with a certificate of award.
d. Honorable Mentions: NT$1,000 book voucher, along with a certificate of award, with 5 recipients expected.

Note: The above awards are subject to the decision of the judging panel and may be adjusted or omitted based on their resolution.

7 Other Important Notes

a. All participating teams must adhere to the principles of fair competition.
b. Any violation or inappropriate behavior will result in disqualification of the participating team.
c. The organizing committee reserves the right to cancel, terminate, modify, or suspend the competition due to special circumstances or reasons.
d. The organizing committee retains the final right of interpretation for these implementation rules. Should you have any questions, please feel free to contact us.
e. By signing the "Consent Form for the Provision of Personal Data" and the "Copyright Property Rights Authorization Consent and Declaration Form," the participants grant the organizing committee the right to use the submitted

information.

Appendix 1

Taiwan Culture and Sustainable Development: The 2nd AI Visual Creation Postcard Design Competition
Consent Form for the Provision of Personal Data

1. The purpose of collecting your personal information by the organizing committee is to carry out work related to the "Taiwan Culture and Sustainable Development: The 2nd AI Visual Creation Postcard Design Competition." The collection, processing, and use of your personal data are regulated by the Personal Information Protection Act and related laws.

2. The personal data collected and used for this event as listed in the submission form includes your name, department and grade, student ID, contact phone number, email address, and documents related to the competition.

3. You agree that the organizing committee may use the personal data you provide to contact you as necessary; and you agree that the organizing committee may continue to process and use your personal data after you have been admitted to the competition.

4. According to the Personal Data Protection Act, you may request the organizing committee to: (1) inquire or view, (2) provide a copy, (3) supplement or correct, (4) stop collecting, processing, and using, and (5) delete your personal data. However, the organizing committee may refuse such requests if necessary for the performance of official duties or business, or as regulated by other laws.

5. If the personal data you provide is reported or found by the organizing committee to be insufficient to verify your identity's authenticity or in cases of impersonation, theft, or inaccurate information, the committee has the right to suspend your submission and admission rights. We apologize for any inconvenience this may cause.

6. Matters not covered by this consent form will be handled in accordance with the Personal Data Protection Act or other relevant regulations.

7. You understand that this consent form meets the requirements of the Personal Data Protection Act and related regulations, and it has the effect of written consent for the organizing committee to collect, process, and use your personal data.

□ I have read this consent form, understand, and agree to be bound by it. (Please tick)

Contributor: (Member 1) _____

(Member 2) _____

Advisor: (optional) _____

(*Please sign personally. Electronic signatures are acceptable.)

Date: 2024/ /

Appendix 2

Taiwan Culture and Sustainable Development: The 2nd AI Visual Creation Postcard Design Competition
Copyright Property Rights Authorization Consent and Declaration Form

1. The signatory guarantees that the submitted work is an original creation and does not infringe on the copyright, patent rights, or violate other legal statutes of any third party. In the case of plagiarism or counterfeiting, once determined by the organizing entity, the contestant(s) will be disqualified from the competition and awards, and will bear full legal responsibility.

2. The signatory guarantees the authenticity of all information provided during the competition, with no falsehoods or misrepresentations. If such cases occur, once determined by the organizing entity, the contestant(s) will be disqualified from the competition and awards, and will bear full legal responsibility.

3. The signatory agrees to unconditionally authorize the organizer(s) to obtain the copyright property rights of the contest entry for National Kaohsiung University of Science and Technology's Department of English, for the purposes of collection, promotion, lending, publication, distribution, reproduction, copying, public display, online access, and other copyright property uses without requesting any additional fees.

4. The copyright of the contest entries belongs to the organizer(s), and the signatory agrees not to exercise the moral rights of authors against the organizer(s). The entries may be used for tax advocacy, exhibitions, and reproduction without additional compensation, including being made into promotional materials, selected publications, recorded CDs, or printed materials.

5. The collection, processing, and use of personal data in this event shall comply with the provisions of the Personal Data Protection Act. All contestants should retain original copies of their submissions and related documents for their records, as the organizing entity will not return them.

6. The signatory agrees to comply with all regulations of the event guidelines. If an entry does not meet any of the regulations, it will not be considered for evaluation. The organizing entity will contact the winners after the evaluation is complete. If a winner cannot be contacted due to incorrect contact information and thus cannot claim their prize, it will be considered as forfeiture of the award.

Contributor: (Member 1)_____

(Member 2)_____

Advisor: (optional)_____

(*Please sign personally. Electronic signatures are acceptable.)

Date: 2024/   /