

SDG





SDG 17.2.1 Relationships with regional NGOs and government for SDG policy

1. Introduction

National Changhua University of Education (NCUE) is the only national university in Changhua County, comprising seven colleges. We are committed to advancing sustainable development in line with the United Nations Sustainable Development Goals (SDGs). By engaging in various collaborative initiatives, NCUE has established strong partnerships with government agencies and non-governmental organizations to implement sustainable development policies jointly. To drive these efforts, NCUE has adopted three core models for promoting sustainable development goals:

- (1) Administrative Governance Level: By participating in key government policy programs, NCUE has aligned its strategies with national sustainable development policies, integrating SDG concepts into university governance and development planning. The following section will showcase 10 cases for illustration.
- (2) Academic Research Level: Faculty members with expertise in various college fields led research projects that align with SDG to produce research of academic value and meet sustainable development needs. The following section will showcase 18 cases for illustration.
- (3) Professional Consultation Level: Our faculty members utilize their professional knowledge to serve in committee positions within government or non-governmental organizations, assisting in the formulation and promotion of relevant sustainable development policies and providing concrete and feasible professional recommendations. The following section will showcase 15 cases for illustration.
- (4) SDGs Target Correspondence Statistics: The 43 projects of sustainable development promoted by the three models above are all related to one or more SDG targets. Statistics show that the listed projects cover all 17 United Nations Sustainable Development Goals, with a total of 128 corresponding instances, fully demonstrating the comprehensive participation and contribution of NCUE in the field of sustainable development. To refer to detailed explanations of each project, see Table 1

Table 1. Correspondence between 43 SDG Projects and SDG Targets in 2024

United Nations Sustainable Development Goals		Number of Corresponding Project Cases
SDGs1	No Poverty	4
SDGs2	Zero Hunger	3
SDGs3	Good Health and Well-being	7
SDGs4	Quality Education	30
SDGs5	Gender Equality	4
SDGs6	Clean Water and Sanitation	3
SDGs7	Affordable and Clean Energy	7
SDGs8	Decent Work and Economic Growth	13
SDGs9	Industry, Innovation and Infrastructure	8

United Nations Sustainable Development Goals		Number of Corresponding Project Cases
SDGs10	Reduced Inequalities	12
SDGs11	Sustainable Cities and Communities	12
SDGs12	Responsible Consumption and Production	3
SDGs13	Climate Action	5
SDGs14	Life Below Water	3
SDGs15	Life on Land	3
SDGs16	Peace, Justice, And Strong Institutions	4
SDGs17	Partnerships for the Goals	7
Total		128

- 2. Participation in Key Government Policy Programs to Promote Goals of Sustainable Development Policy (10 Cases Listed)
 - (1) Implementing the Ministry of Education's "Plan of Central District College & University Gender Equity Education Promotion Center" (2024): NCUE undertook the gender equality education-related affairs promoted by the Ministry of Education in central Taiwan. Through organizing "Executive Secretary Forums," "Processing Clerk Succession Meetings," "Capacity Building Activities Practice Exchange and Discussion of Gender Equality Work," "Briefing on Regulations Governing Prevention of Gender-Related Incidents on Campuses," and "Briefing on Professional Ethics Standards Related to Sex or Gender for Presidents, Faculty, and Staff," NCUE worked to improve the operation of committees of gender equality education at universities and colleges in central Taiwan, to strengthen horizontal connections among schools, to enhance gender equality awareness among personnel, and to establish organizations of gender equality education with substantial effectiveness.

Central District College & University Gender Equity Education Promotion Center Website: https://sites.google.com/gm.ncue.edu.tw/central-gendercenter

Campus Headlines: https://www.ncue.edu.tw/p/406-1000-26470,r93.php?Lang=zh-tw



Figure 1: Our university established the Central District College & University Gender Equity Education



Figure 2: President Chen Ming-fei of NCUE delivered opening remarks at two briefing sessions

Promotion Center, commissioned by
MOE, located on the second floor of
the Baisha Building's west wing

SDGs Relevance: Quality Education, Gender Equality, Reduced Inequalities

(2) Implementation of the Ministry of Education's "Industry-Academia Collaboration Program for Cultivating Practical Talent in the Semiconductor Industry at Colleges and Universities" (2024): NCUE by established a semiconductor talent cultivation program to align with the Executive Yuan's national development policies regarding the "Five Plus Two Industry Innovation Plan" and "Six Core Strategies". NCUE considered local companies and their characteristics when choosing collaborative enterprises, and we collaborated with Silicon ware Precision Industries to establish the Industry-Academia Collaboration Program for Cultivating Practical Talent in the Semiconductor Industry at Colleges and Universities. The company provided 30 job positions, including Customer Service CP Engineers, Process Engineers, and Manufacturing Supervisors, and assigned 14 senior high-level professionals to serve as industry mentors. These mentors collaborate with our faculty to teach semiconductor knowledge, skills, and corporate culture to program students, thereby cultivating their semiconductor competencies. Students who pass the course assessments can join the company after completing the program.



Figure 3: Visit Silicon ware Precision Industries



Figure 4: Talent training program class in session

(3) Implementation of the Ministry of Education's Third Phase of Big Data in Education Micro Program (2024): This program developed students' ability to understand big data concepts and effectively use various big data analysis tools for practical applications in education. It provided professional knowledge and skills of big data in education and promoted the establishment of interdisciplinary learning. The program also encouraged faculty and students to use everyday technology to solve real-world problems and to collaborate with industry or other stakeholder groups. This collaboration helps learning groups to jointly identify, define, develop, and propose solutions to practical field challenges, thereby improving students' ability to apply technology. See Appendix 17.2.1-A for additional details.



Figure 5: Project implementation process



Figure 6: Project class in session

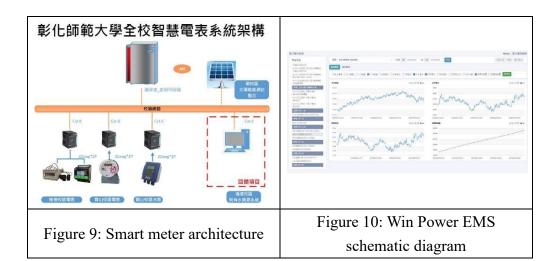
SDGs Relevance: Quality Education, Partnerships for the Goals

(4) Implementation of the Ministry of Education's Plan to Enhance Energy Conservation in Colleges and Universities (2024): Our university enhanced efficiency of energy usage and implemented energy conservation and carbon reduction through the installation of smart meters and an Energy Management System (EMS). The plan involved installing 40 smart meters in five buildings frequently used by faculty and students at the Jinde Campus, including the College of Science Building, Academic Main Hall, Student Activity Center, Qiao-Si Hall, and Gymnasium. These meters collect detailed electricity usage information including current, voltage, power, and electricity consumption at one-minute intervals. Simultaneously, an Energy Management System (EMS) was established. This EMS system features core functions including "electricity usage visualization, electricity management reports, and over-contract alerts." The system architecture adopts a hierarchical design with both local and cloud interfaces, providing real-time electricity monitoring, over-contract alerts (such as Email or Line Notify), power report generation, electricity usage comparative analysis, electricity unit and tariff plan management, permission management, and operational logging and fault alarm functions. Additionally, the EMS supports the analysis of electricity tariff plan optimization and the assessment of renewable energy integration benefits (such as solar energy and energy storage). See Appendix 17.2.1-B for additional details.



Figure 7: Communication network equipment

Figure 8: Smart meter installation



SDGs Relevance: Affordable and Clean Energy, Quality Education, Climate Action

(5) Implementation of the Ministry of Education's Subsidized Project for Campus Green Hedges in Public and Private Schools at All Levels (2024): To create a green ecological campus, NCUE applied for the campus green hedge project that uses native Taiwanese plants to green perimeter walls, increase vegetation coverage, reduce environmental temperature, and purify air. This project includes improvements to walls at both Jinde and Baoshan campuses, replacing original corrugated iron or concrete barriers with greenery featuring climbing fig, honeysuckle, camphor trees, and osmanthus. These climbing plants transform cold walls into lush, multi-layered aesthetic features that showcase the beauty of native Taiwanese plants while enhancing campus and community environments.



Figure 11: Improvement of the eastern perimeter wall at Jinde Campus

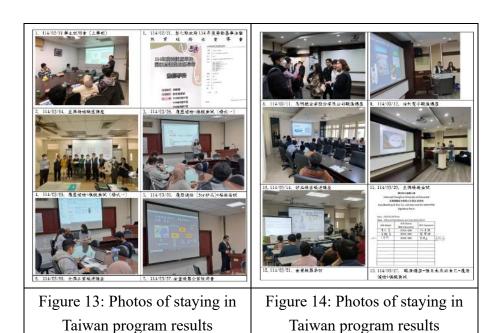


Figure 12: Improvement of the perimeter wall of Teaching Building 1 at Baoshan Campus

SDGs Relevance: Sustainable Cities and Communities, Climate Action, Life on Land

(6) Implementation Outcomes of the Ministry of Education's Pilot Program for Professionalized Career Counseling of International Students Remaining in Taiwan for Employment (2024): NCUE received Ministry of Education subsidies to implement the "Pilot Program for Professionalized Career Counseling of International Students Remaining in Taiwan for Employment," coordinated by the Office of International Affairs. The program enhanced

international students' career readiness and local employment opportunities through career guidance platforms, internship matching, resume writing support, mock interviews, and corporate visits. This improved workplace adaptability and job competitiveness. By integrating internal and external resources, it encouraged student-industry collaboration, promoted sustainable international talent development, and strengthened our internationalization and social responsibility efforts, all while supporting our goal of cultivating globally mobile talent.



SDGs Relevance: Quality Education, No Poverty, Decent Work and Economic Growth, Industry, Innovation and Infrastructure, Partnerships for the Goals

(7) Implementation of the Ministry of Education's Campus Mental Health Promotion Program (2024): NCUE enhanced campus mental health through a comprehensive campus mental health promotion program based on the "whole-school guidance model." Through curriculum teaching and activity participation, we have established correct values among students and help relevant personnel enhance professional competence and increase sensitivity. The program was organized through three major dimensions: (a)organizing related issue activities, (b) offering general education courses, and (c) training relevant personnel to enhance professional competence." Additionally, some key lectures were recorded as digital teaching materials to widely disseminate correct physical and mental health values, creating a warm, caring, and healthy campus atmosphere. See Appendix 17.2.1-C for more detail.



Figure 15: Promoting mental health support



Figure 16: Life education workshop

SDGs Relevance: 3. Good Health and Well-being, 4. Quality Education, 5. Gender Equality

(8) Implementation of the Ministry of Education's "Teacher Quality Enhancement and Characteristic Development Program" (2024): NCUE has long been dedicated to providing high-quality preservice teacher education, focusing on developing students' professional skills and innovative teaching abilities for their future careers. This program focused on cultivating excellent teachers with communication, cooperation, and reflective practice capabilities. It emphasized not only so the tripartite cooperation among university professors, secondary school teachers, and student teachers, promoting mutual teaching professional development. It also expanded and deepened the results of local educational guidance work over the years, actively responding to local educational field needs, improving learning opportunities and quality for rural and disadvantaged students, and demonstrating higher education's positive social impact. The program enabled students to learn and gave back to society, further cultivating their educational responsibility and local practice capabilities. These results showcased our university's commitment and action in contributing to society through the educational profession. See Appendix 17.2.1-D for more details.



Figure 17: Baisha Summer School (Xizhou Team)



Figure 18: The Photo of Institutional Research Center - Chinese Department Project Forum

SDGs Relevance: Quality Education, Decent Work and Economic Growth, Reduced Inequalities.

(9) Implementation of the Ministry of Education's "Professional Development Training Program for Novice Elementary and Secondary School Teacher Induction and Guidance" (2024): NCUE guided quality novice teachers in developing their educational careers, through Ministry of Education's "Professional Development Training Program for Novice Elementary and Secondary School Teacher Induction and Guidance", which constructed a support system for novice teachers. NCUE has planned specific approaches across three dimensions to guiding novice teachers: (a) Professional Development Training for New Teacher Induction, (b)Mentor Teacher Training Mechanism, and (c) Teacher Recurrent Workshop. Through systematic plans for novice teacher induction guidance and professional development training courses, NCUE aimed to inspire novice teachers' aspirations for education and enhance their classroom management and innovative teaching competencies. See Appendix 17.2.1-E for more details.



Figure 19: Co-creating Educational Truth, Goodness, and Beauty -Teacher Li Ming-rong's Class in Session



Figure 20: 【Character Strength】

Character Strength That

Accompanies Us All the Way - Satir

Dialogue and 7 Good Habits
Teacher Sun Pei-shan's Class

SDGs Relevance: Quality Education, Decent Work and Economic Growth

(10) Implementation of the Ministry of Education's "Educational Internship Excellence Award Selection Work Plan" (2024): The Educational Internship Excellence Award was created by the Ministry of Education to cultivate outstanding teachers, and NCUE has been commissioned to organize the award since 2006. The Educational Internship Excellence Award aims to evaluate the tripartite relationship in educational internships, establishing awards for individuals participating in educational internships, including the Exemplary Award for internship supervising teachers, the Excellence Award for internship mentoring teachers, the Model Award for intern students, and the Unity Award for cooperative teams. Through this reward system, we share the experiences of supervising teachers as exemplars, promote the excellent teaching of mentoring teachers, establish models for intern students, foster team cooperation spirit, help intern students develop practical abilities to transform professional standard theories, encourage more outstanding prospective teachers to enter the education field, and

ultimately achieve a sense of professional calling. See Appendix 17.2.1-F for more details.



Figure 21: Ministry of Education Political Vice Minister posed with Winners of Internship Supervising Teacher Exemplary Award



Figure 22: Ministry of Education Political Vice Minister posed with Winners of Internship Mentoring Teacher Excellence Award



Figure 23: Ministry of Education
Political Vice Minister posed with
Winners of Intern Student Model
Award



Figure 24: Group photo at the award ceremony

SDGs Relevance: Quality Education, Decent Work and Economic Growth.

- 3. SDG Projects Implemented by Faculty (18 Cases Listed)
 - (1) Professor Chen Wei-li from the Department of Electronic Engineering served as Co-Principal Investigator of the "Sustainable Changhua: Green Energy Perspective in Education, Technology, and Economy" Project. This project aimed to care for disadvantaged students by developing living technology teaching aids, enabling them to engage in hands-on practical activities. It also worked on cultivating green energy seed teachers for elementary and secondary schools by organizing teacher training workshops.



Figure 25: Semiconductor Green Energy Smart House Teaching Kit applied in Science and Technology curriculum of 9th Grade



Figure 26: Hands-on practice process



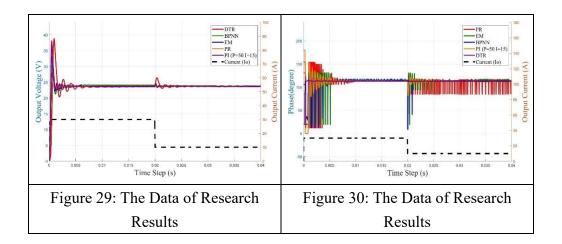
Figure 27: Hands-on practice process



Figure 28: Semiconductor Green
Energy Smart House Teaching Kit
applied in the Grade 9 Science and
Living Technology curriculum of 9th
Grade

SDGs Relevance: Quality Education, Affordable and Reduced Inequalities.

(2) Professor Chen Kuan-Chu from the Department of Electrical Engineering serves as the principal investigator for the project of National Science and Technology Council "Development of Electric Vehicle Charging Systems Based on Neural Network Control." The development of electric vehicle charging system technology is both crucial and urgent because electric vehicles can effectively reduce carbon emissions. This project promotes the development of Taiwan's electric vehicle industry by conducting research on various related technologies for electric vehicle charging systems. The overall goal is to develop adaptive learning high-efficiency intelligent charging control systems, and it concentrates on achieving high-efficiency electric vehicle battery charging and neural network control system design.



SDGs Relevance: Affordable and Clean Energy, Industry, Innovation and Infrastructure

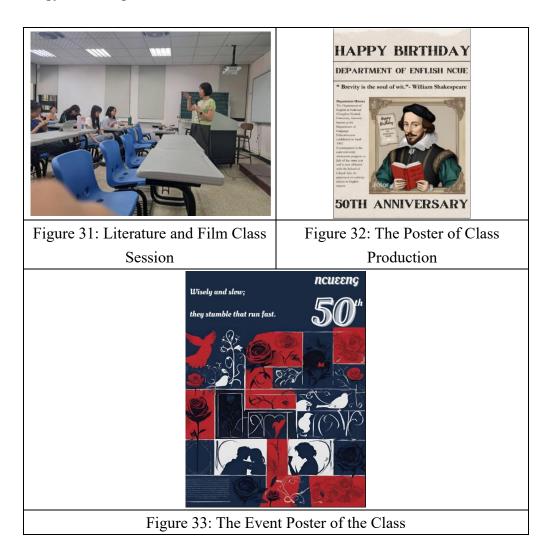
(3) Professor Hsieh Ping-Chen from the Department of Mechatronic Engineering serves as the principal investigator for the "Industry-Academia Cooperation Program for Smart Sensing and Decision Control Talent Development", which is organized by the Industrial Development Administration, Ministry of Economic Affairs. This project addresses recent global industrial development trends and other international priorities, including energy conservation, consumption reduction, and achieving net-zero carbon emissions. Green smart manufacturing is a new operational challenge that Taiwan's manufacturing industry must prioritize over the next decade. In the process of production manufacturing and automation equipment moving toward green smart manufacturing development, smart sensing and decision control technology play a very important role. Therefore, the goal of this project is to cultivate students in the mechanical field to gain deeper understanding of sensing and circuits, signal processing and analysis, machine learning, decision control, green manufacturing, carbon inventory and energy-saving technologies, and establish capabilities in related hardware equipment usage and software programming. This project cultivates smart mechanical talents with cross-disciplinary knowledge and integrated capabilities. Beyond strengthening students' employment competitiveness, students may become a new force in developing green smart manufacturing domestically after graduation. See Attachment 17.2.1-G for more details.

SDGs Relevance: Quality Education

(4) Professor Chu Ling-Yi from the Department of Geography serves as the principal investigator for the National Science and Technology Council's project, "Beyond Geopolitics: Space and Subjectivity of Matsu's Blue Tears." Matsu has been situated in geopolitical changes. By examining the interconnections between oceans, waves, rocks, sand, atmosphere, haze, diatoms, dinoflagellates, fishermen, and tourists, this research encourages a reconsideration of alternative approaches to cross-strait relations after the cold war between ROC and PRC. See Attachment 17.2.1-H for more details.

SDGs Relevance: Reduced Inequalities, Life Below Water, Life on Land, Peace, Justice And Strong Institutions

(5) Professor Chu Hsiang-Chun from the Department of English serves as the principal investigator for the Ministry of Education's project, "Watching Movies, Learning Literature: Cultivating Visual Literacy through Literary Film Appreciation." The rise of artificial intelligence has accelerated the transmission and diffusion of visual information, making the cultivation of abilities to identify audiovisual image information more important. This project integrates the interdisciplinary learning of literature, knowledge of film technology, AI-collaborative graphic design, and short video production to enhance students' visual literacy and professional film technology knowledge.



SDGs Relevance: Quality Education, Gender Equality, Reduced Inequalities

(6) Professor Lu Pei-Wen from the Department of Geography executes the National Science and Technology Council's Climate Resilience Development and Disaster Prevention Adaptation Governance Project. With participatory approaches to just transition as the core, this project constructs methods for pursuing climate resilience development within the scope of disaster prevention adaptation governance, to strengthen climate resilience development and disaster prevention adaptation, sustaining Taiwan and the overall global ecological environment.



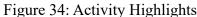




Figure 35: Activity Highlights



Figure 36: Group Photo

SDGs Relevance: Affordable and Clean Energy, Reduced Inequalities, Sustainable Cities and Communities, Climate Action, Life Below Water, Life on Land, Peace, Justice And Strong Institutions

- (7) Professor Li Tsung-Hsin from the Graduate Institute of History serves as the principal investigator for the Water Resources Planning Institute, Water Resources Agency, Ministry of Economic Affairs' project "Research of Tamsui River Water Culture Water Environment Changes and Disaster Adaptation." This project aims to protect the Earth's water resources and environment, with work items including:
 - (a) Inventory, Compilation, and Impact Analysis of Historical Spatial Data/Maps Related to Water Environment Changes.
 - (b) Tracing the Historical Context of River Channel Changes and Watershed Governance
 - (c) Water Culture Nurtured by River Channels, Disasters, and Folk Beliefs
 - (d) Research and Analysis of Water Culture for Adaptation to Climate Change
 - (e) Administrative Coordination, Work Briefings, and Report Compilation The research investigation is executed using four methodologies:
 - (a) Collection and Study of Existing Research Findings and Historical Records; (b) Inventory and Pre-processing of Historical Spatial Data/Maps; (c) On-site Investigation (Fieldwork and Oral History); and (d) Cross-disciplinary Research Discussions.

This approach, along with tasks such as presentations and report compilation, aims to achieve the research objective regarding water environment change and disaster adaptation.

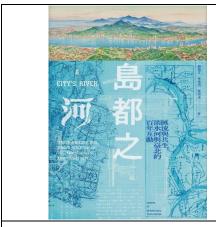


Figure 37: Main Cover Image of the Project



Figure 38: Field Survey Highlights

SDGs Relevance: Quality Education, Sustainable Cities and Communities

(8) Professor Shen Chi-Tai from the Graduate Institute of Human Resource Management serves as the principal investigator for the National Science and Technology Council's project "Perceived Supervisor Emotional Blackmail and Harmonious Passion: The Dual Mediating Effects of Rumination and Psychological Capital." Workplace emotions and a positive work environment significantly impact the physical and mental health and well-being of a nation's citizens, while work passion is also an issue that researchers are focused on. Particularly, harmonious passion represents that individuals have full autonomy at work and, through <u>free</u> will choices, engage in work activities they love, effectively enhancing individual work performance and behavioral expression. However, under circumstances where supervisor-subordinate relationships are unequal, supervisor emotional blackmail may seriously affect subordinates' work autonomy and engagement, reducing harmonious passion. Furthermore, clearly understanding how supervisor emotional blackmail affects subordinates' harmonious passion help researchers grasp the entire the process of influence. Therefore, this research attempts to construct an integrated dual mediation model, exploring how perceived supervisor emotional blackmail triggers subordinates' ruminative cognitive thinking, thereby reducing psychological capital and ultimately affecting subordinates' harmonious passion.

SDGs Relevance: Good Health and Well-being, Gender Equality

(9) Professor Peng Chih-Wei from the Department of Accounting serves as the principal investigator for the Department of Accounting's project "Integrated Research on ESG Disclosure Dilemmas."

Domestic listed companies and OTC need to disclose the quality of management through ESG sustainability reports, but literature and practitioners have quite divergent views on ESG performance and ESG disclosure, which cause challenges of ESG disclosure. This project attempts to examine how, from the perspective of organizational behavior and sustainable governance, [these factors] affect the challenges of ESG disclosure. It also seeks to analyze the economic consequences of these ESG disclosure challenges, hoping to fill the gaps in the

literature. The relevant research findings can also provide a reference for regulatory authorities when formulating industrial policies. See Attachment 17.2.1-I for more details.

SDGs Relevance: Quality Education, Sustainable Cities and Communities, Climate Action

- (10) Professor Chiang Chia-Yu from the Department of Business Administration serves as the principal investigator for the Ministry of Education's project "Focusing the Light: Developing Sustainable Management Accounting Talent with an SROI Perspective through Project-Based Learning and Design Thinking in Non-Profit Settings." This project leads students into non-profit organization fields, focusing on the "Visually Impaired Barista and Empowerment Workshop" project of the Light of Love Association. Students participate in the training and work of visually impaired baristas, understanding the project's operational mechanisms, funding utilization methods, and social impact through interaction with project stakeholders, combined with design thinking's innovative thinking processes to propose concrete solutions. This project is expected to cultivate interdisciplinary management accounting talent with SROI quantitative analysis skills, sustainable management vision, and social problem-solving capabilities. These talents may support Taiwan in achieving SDG of UN in the future and assist non-profit organizations in strengthening resource management, promoting financial transparency, and enhancing social responsibility.
 - SDGs Relevance: No Poverty, Quality Education, Decent Work and Economic Growth, Reduced Inequalities, Partnerships for the Goals
- (11) Professor Lin Su-Lin from the Graduate Institute of Vehicle Technology serves as the principal investigator for the Ministry of Education's project "Teaching Practice Research on Applying Innovative Diversified Teaching Strategies to Artificial Intelligence and Advanced Vehicle Technology Courses. This project collaborates with the industry, inviting industry professionals to co-teach and lead practical case studies, utilizing diverse strategies to cultivate practical innovation skills in AI and vehicle technology. This approach aims to strengthen students' professional expertise and facilitate their transition into the workplace, thereby contributing to the development of related industries and students' career advancement.
 - SDGs Relevance: Quality Education, Affordable and Clean Energy, Decent Work and Economic Growth, Industry, Innovation and Infrastructure, Reduced Inequalities, Sustainable Cities and Communities
- (12) Professor Chen Ti-Cheng from the Department of Electrical and Mechanical Technology serves as the principal investigator for the Ministry of Education's project:"2024 Teaching Practice Research Project Industry-Oriented Cooperative Learning to Enhance Professional Technical Talent Practical Capabilities Using Industry Practice Seminar Courses as an Example. This research project explores using industry-oriented cooperative learning models to enhance the professional knowledge and practical skills of students in foundry industry-academia collaboration programs. This project focuses on industry-oriented cooperative learning models, and enables students to develop simultaneously in academic knowledge and practical skills.



Figure 39: Inspecting Students of Shen Wu Foundry



Figure 40: Inspecting Hua Mo Industry

SDGs Relevance: No Poverty, Good Health and Well-being, Clean Water and Sanitation, Decent Work and Economic Growth, Industry, Innovation and Infrastructure, Responsible Consumption and Production

(13) Professor Lin Su-Lin from the Graduate Institute of Vehicle Technology serves as the principal investigator for the National Science and Technology Council's project: "Research and Development of Non-Line-of-Sight Imaging Technology Using Artificial Intelligence and Doppler Radar." This project is dedicated to developing advanced Non-Line-of-Sight (NLOS) imaging technology that combines Artificial Intelligence and radar sensors, aiming to improve the safety of autonomous vehicles, particularly in complex traffic areas like Taiwan. Related applications of these technologies will contribute to urban livability and national health in Taiwan.

SDGs Relevance: Quality Education, Affordable and Clean Energy, Industry, Innovation and Infrastructure, Reduced Inequalities, Sustainable Cities and Communities

(14) Professor Chang Ching-Ching from the Department of Special Education serves as the principal investigator for the Ministry of Education's project: "Action Research on the Application of Coach Training in Practicum in Gifted Education." Coach training is a continuous, dynamic, and interactive process of learning. Through demonstration, support, and encouraging self-reflection by the coach, it utilizes existing knowledge and skills to continuously improve the coacher's work practices and develop new skills. The theme of this teaching research coach training methods into gifted education teaching practicum courses, developing students' professional knowledge and skills. See Attachment 17.2.1-J for more details.

SDGs Relevance: Quality Education

(15) Professor Lin Su-Ching from the Graduate Institute of Education serves as the principal investigator for the National Science and Technology Council's project "Exploring the Relationship between Teacher Professional Development Programs and Student Learning - Application of Relational Systems Evaluation Model, Developmental Evaluation, and Five-Stage Model." This project applies relational systems evaluation as a model to build principals'

and teachers' evaluation capabilities, enhancing participants' evaluation thinking, cultural competence, and evaluation knowledge. It implements the reform concept of 12-year basic education, "teachers are curriculum designers, implementers, and evaluators"; breaking through traditional effectiveness evaluation levels of teacher professional development program, combining the advantages of developmental evaluation and five-stage models, considering participants' reactions, learning, application, organizational support, and impact on student learning assessment. This project introduces process-oriented guided inquiry teaching methods, allowing principals and teachers from different types of schools to have more professional dialogue, innovating teaching theory and practice, promoting teacher professional development and enhancing student learning effectiveness. See Attachment 17.2.1-K for more details.

SDGs Relevance: Quality Education

(16) Professor Hsieh Yi-Hsing from the Department of Guidance and Counseling serves as the principal investigator for the Ministry of Education's project "The Improvement Effects of Self-Control Training Integrated into General Psychology Teaching on Undergraduate Students' Bedtime Procrastination and Class Quality." This research, designs a self-control training curriculum for undergraduates with bedtime procrastination habits, integrating conceptual knowledge of the course into general psychology course teaching. This course aims to enhance students' self-control and thereby improve bedtime procrastination and class quality. This research uses the pre-post test, employing bedtime procrastination scales to screen students with procrastination habits from two classes as experimental and control groups. The experimental group (students of Class B) underwent 50-minute self-control training groups per week for 8 weeks, while the control group (students of Class A) underwent 50-minute group activities per week. Experimental results showed that the scale score of bedtime procrastination of the experimental group decreased, self-control increased, and class quality improved, compared to the control group. See Attachment 17.2.1-L for more details.

SDGs Relevance: Good Health and Well-being, Quality Education

(17) Professor Kao Kun-Che from the Department of Chemistry serves as the principal investigator for the National Science and Technology Council's project "Surface Plasmon-Induced Hot Carrier Transfer: Applications of Interface Structure Control and Photocatalytic." This project uses precisely controlled chemical synthesis methods to prepare model catalysts with well-defined structures, exploring the unique photoelectrochemical properties of surface plasmon nanostructures in fundamental research. It aims to clarify the relationship between interface structure and photocatalytic reactions. On the application level, developing new generation high-performance surface plasmon photocatalysts can more effectively utilize solar energy to drive high-energy-consuming catalytic reactions, reducing carbon emissions and improving energy usage efficiency. See Attachment 17.2.1-M for more details.

SDGs Relevance: Clean Water and Sanitation, Affordable and Clean Energy, Industry,

Innovation and Infrastructure

(18) Professor Liu Yen-Yi from the Department of Biology serves as the principal investigator for the National Science and Technology Council's project "Establishment of an Integrated Visualization and Analysis Platform and Research on Drug Resistance Transmission Patterns in Important Nosocomial Pathogens in Taiwan, Utilizing Pangenome Multi-Locus Sequence Typing Principles and Machine Learning Methods." The rapid increase of antimicrobial-resistant microorganisms has become a major global public health challenge, making disease treatment increasingly difficult. Attention to antimicrobial resistance fingerprint epidemiological distribution is crucial for today's medical community and global public health. Therefore, this research establishes virtual antimicrobial resistance fingerprint conversion methods, providing epidemiological distribution that contributes to promoting new drug development to address increasing antimicrobial resistance challenges, ensuring that the rise of antimicrobial-resistant microorganisms does not adversely affect health and social stability. See Attachment 17.2.1-N for more details.

SDGs Relevance: Good Health and Well-being

4. Faculty Members Serving as Committee Members in Relevant Organizations to Promote Sustainable Development Policies (15 Cases Listed)

As the only national university in Changhua County, NCUE comprises seven colleges and has achieved remarkable academic accomplishments and industry-academia collaboration performance. The professional achievements of faculty members across various fields are highly recognized by local government agencies. In addition to accepting invitations from various government departments to serve as advisory or members of review committees, faculty of NCUE actively participate in relevant committees and review meetings of government agencies and ministries. By providing concrete recommendations for formulation reference of government agencies' policy, NCUE contributes to achieving the government's SDG sustainable development policy objectives across various dimensions.

- (1) Professor Lin Su-Ching from the Graduate Institute of Education serves as a member of the "University Teacher Education Center Evaluation Committee" of the Ministry of Education, evaluating the strengths and weaknesses of teacher evaluation centers at various universities. See Attachment 17.2.1-O for more details.
 - SDGs Relevance: Quality Education
- (2) Professor Lin Su-Ching from the Graduate Institute of Education serves as a member of the Changhua County Government's "Teacher Professional Review Committee," reviewing teacher professional issues.



Figure 41: Appointment letter for Professor Lin Su-Ching serving as a member of the Changhua County Government's "Teacher Professional Review Committee"

SDGs Relevance: Quality Education

(3) Professor Kung Hsin-Yi from the Graduate Institute of Education serves as a member of the National Academy for Educational Research's Researcher Review Committee, reviewing matters related to researchers' appointment, promotion, evaluation, administrative service performance assessment, academic ethics cases, and rewards and punishments.



Figure 42: Appointment letter for Professor Kung Hsin-Yi from the Graduate Institute of Education serving as a member of the National Academy for Educational Research's Researcher Review

Committee

SDGs Relevance: Quality Education

(4) Professor Chan Meng-Chi from the Department of Special Education serves as a member of the Ministry of Education's "Special Education Evaluation Committee," evaluating special

education work of special education classes in high school. See Attachment 17.2.1-P for more details.

SDGs Relevance: Quality Education

(5) Professor Yang Ya-Hui from the Department of Special Education serves as a member of the "Consultative Committee Member for the 2024 Academic Year's Entrance Examination of Students with Disabilities for Higher Education Institutions," providing appropriate measures of examination service.

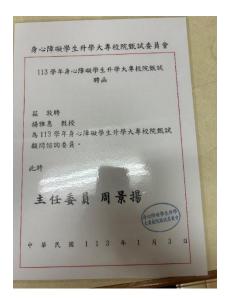


Figure 43: Appointment letter for Professor Yang Ya-Hui from the Department of Special Education serving as a member of the "Consultative Committee Member for the 2024 Academic Year's Entrance Examination of Students with Disabilities for Higher Education Institutions"

(6) Professor Yang Mei-Chih from the Department of Special Education serves as a member of the "Committee Member of the Inmate Psychological and Physical Treatment and Evaluation Team for 2024 at Taichung Prison, Agency of Corrections, Ministry of Justice," providing opinions on mental and physical treatment assessments for inmates before serving their sentences.



Figure 44: Appointment letter for Professor Yang Mei-Chih from the Department of Special Education serving as a member of the "Committee Member of the Inmate Psychological and Physical Treatment and Evaluation Team for 2024 at Taichung Prison, Agency of Corrections,

Ministry of Justice"

SDGs Relevance: Good Health and Well-being, Quality Education, Peace, Justice and Strong Institutions, Partnerships for the Goals

(7) Associate Professor Kung Hui-Yi from the Department of English serves as the principal investigator of the Changhua County English Teaching Resource Center Project for Academic Year 2023, assisting in reviewing lesson plans, teaching reflections, and self-evaluation reports of foreign teachers in Changhua County, providing feedback and suggestions, and conducting on-site teaching supervision of foreign English teachers. Related website: https://www.cieetrc.chc.edu.tw/

SDGs Relevance: Quality Education, Partnerships for the Goals

(8) Professor Pei-Wen Lu of the Department of Geography, College of Liberal Arts, serves as a "Review Committee Member for the National Land Management Agency (NLMA), Ministry of the Interior." She assists in the policy review of matters related to national land planning deliberation or coordination, including the review of national land plans' establishment or modification, cross-functional zone plans for national defense and major public facilities or utilities, soliciting opinions for the National Land White Paper, and the review and improvement of the national land plan. Related website: List of Review Committee Member for NLMA: https://www.nlma.gov.tw/ch/moicommittee/comm7/56

SDGs Relevance: Decent Work and Economic Growth, Industry, Innovation and Infrastructure, Sustainable Cities and Communities, Climate Action

(9) Professor Lu Pei-Wen from the Department of Geography, College of Liberal Arts, serves as a member of the Ministry of the Interior's Construction and Development Fund Management Committee from 2023 to 2025, assisting the government in the effective collection, custody, and

utilization of the construction and development fund, contributing to the promotion and development of national construction.



Figure 45: Letter regarding Associate Professor Lu Pei-Wen from the Department of Geography serving as a member of the Ministry of the Interior's Construction and Development Fund

Management Committee

SDGs Relevance: Decent Work and Economic Growth, Reduced Inequalities, Sustainable Cities and Communities

(10) Professor Lien Yi-Pin from the Graduate Institute of Statistics and Information serves as a member of the Institutional Review Board for Biomedical Science Research (IRB-BM) at Academia Sinica, reviewing the protection measures for the rights and welfare of research subjects, as well as other matters related to biomedical research projects. Related website: https://bm.irb.sinica.edu.tw/posts/140169

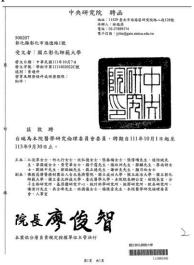


Figure 46: Appointment letter for Professor Lien Yi-Pin from the Graduate Institute of Statistics and Information serving as a member of Institutional Review Board for Biomedical Science Research

(IRB-BM) at Academia Sinica.

- SDGs Relevance: Good Health and Well-being, Quality Education, Peace, Justice and Strong Institutions, Partnerships for the Goals
- (11) Assistant Professor Liao Hsing-Kuo from the Department of Electrical Engineering and Mechanical Technology, College of Technology, was seconded to the Ministry of Education as Chief Secretary from September 1, 2020, to May 19, 2024, assisting MOE in coordinating inter-ministerial affairs. During the secondment, Mr. Liao actively planned and promoted important educational policies and regulations, working to improve the educational environment and receiving the Ministry of Education's Model Civil Servant Award for 2023. Campus headlines: https://www.ncue.edu.tw/p/406-1000-23435,r93.php?Lang=zh-tw



Figure 47: The Ministry of Education held a Model Civil Servant Award ceremony on August 23, 2023, with 19 recipients selected, including various levels of positions such as technicians, inspectors, secretaries, section chiefs, division chiefs, nurses, head nurses, physicians, and senior administrative personnel



Figure 48: Chief Secretary Liao Hsing-Kuo (right) receiving the certificate from Minister Pan Wen-Chung (left).

SDGs Relevance: Quality Education

(12) Professor Huang Tun-Chun from the Graduate Institute of Human Resource Management, College of Technology, serves as a review committee member of the National Science and Technology Council's Humanities and Social Sciences Research Center, assisting in the TSSCI journal selection of the management field, serving the academic community and promoting the improvement of academic and journal standards. See Attachments 17.2.1-Q, 17.2.1-R, and 17.2.1-S, 17.2.1-T for more details.

SDGs Relevance: Quality Education

(13) Professor Huang Wei-Tse from the Department of Electrical Engineering and Mechanical Technology serves as a member of the Ministry of Economic Affairs' third-term "Power Reliability Review Committee," assisting the Ministry of Economic Affairs in conducting fair and impartial national power dispatch while ensuring power system reliability, enhancing power system safe operation, and ensuring uninterrupted power supply for public livelihood, economic, and industrial use.



Figure 49: Appointment letter for Professor Huang Wei-Tse serving as a member of the Ministry of Economic Affairs' "Power Reliability Review Committee"

SDG Relevance: Decent Work and Economic Growth, Reduced Inequalities, Sustainable Cities and Communities

(14) Professor Chiang Chia-Yu from the Department of Business Administration, College of Management, serves as a member of the "Miaoli County Cable Television Rate Review Committee," assisting local government in implementing communication and broadcasting regulatory policies, reviewing cable television operators' fee standards and their reasonableness, and ensuring a balance between rights of public viewing and industry development. The duties of the committee include: reviewing cost structure and service quality of rate adjustment applications, collecting opinions from the public and consumer groups, providing professional reviews and policy recommendations to promote information access and digital equity, and implementing public interest.

- SDGs Relevance: No Poverty, Decent Work and Economic Growth, Reduced Inequalities, Sustainable Cities and Communities
- (15) Professor Chiang Chia-Yu from the Department of Business Administration serves as a member of the "Operational Performance Evaluation Committee for Private Participation in Public Construction Projects at the National Taiwan Museum of Fine Arts". Professor Chiang is responsible for reviewing the performance results of private participation (PPP) in arts and cultural facility operation projects, and evaluating aspects such as management, service quality, financial operations, cultural promotion, and social benefits. The committee aims to ensure effective utilization of cultural public resources, enhance the sustainable operation efficiency of art venues, promote cultural equity and public participation, and strengthen the governance framework of public-private partnerships.

SDGs Relevance: Decent Work and Economic Growth, Sustainable Cities and Communities, Responsible Consumption and Production, Partnerships for the Goals

SDG 17.2.2 Cross sectoral dialogue about SDGs

NCUE is a leading national university in the Central Taiwan region (Changhua, Taichung, and Nantou) in terms of academic achievement and industry-academia collaboration performance.

Faculty members across all colleges continually initiate or participate in cross-sectoral dialogues with governmental and non-governmental organizations in their respective fields, including organizing special lectures, seminars, and related conferences. The aim is to achieve various sustainable development goals. The execution of 16 seminars or related events held by the University in 2024 is detailed as follows:

1. College of Education

The Department of Guidance and Counseling, College of Education, organized the "International Conference of Dialogue with Embodied Imagination® Among Multiple Professionals." This conference was co-hosted by the International Society for Embodied Imagination (ISEI) and NCUE from July 31 to August 4, 2024. This was Robert's first visit to Taiwan to personally teach the Embodied Imagination® (EI) method. Moreover, it was the first time in Taiwan—following nearly 20 to 30 years of implementation in other Asian countries (Japan, China)—to conduct in-depth, face-to-face dialogue on the multi-professional applications of Embodied Imagination in "AI artificial intelligence, psychotherapy and arts, and healthcare." The conference comprised two parts: (1) Pre-conference workshop (July 31 and August 1): Two-day workshop on Jungian archetypal psychology and alchemical psychology; (2) Cross-professional dialogue international symposium (August 2-4): This symposium focused on Embodied Imagination® and cross-professional dialogue and hands-on experience, featuring 3 thematic forums over three days, 6 groups daily both in-person and online (18 sessions total) of small-scale Embodied Imagination® (EI) experience groups led by 8 internationally certified senior Embodied Imagination® practitioners, and 6 cross-professional thematic dialogue lectures.

Campus Headlines: https://www.ncue.edu.tw/p/406-1000-27757,r93.php?Lang=zh-tw





Figure 1: The Chinese poster for the symposium

Figure 2: Group photo at welcome reception

SDGs Relevance: Good Health and Well-being, Quality Education, Gender Equality, Peace, Justice and Strong Institutions, Partnerships for the Goals

2. Christine Suniti Bhat, President of the American Counseling Association (ACA), visited NCUE's Department of Guidance and Counseling, College of Education, for a keynote speech (2024). The Department of Guidance and Counseling, College of Education, invited Christine Bhat, the 73rd and current President of the American Counseling Association, and Professor Chao-Mei Chiang from the Department of Educational Psychology and Counseling at National Taiwan Normal University to visit NCUE on October 23, 2024. As the first Asian immigrant to serve as President of the American Counseling Association in its history, Bhat actively promotes diversity and inclusion, demonstrating to immigrant communities the possibilities of active participation and leadership in social affairs. ACA as the largest professional counseling association in the United States, is dedicated to supporting professional counselors and promoting multicultural, ethical practice, and social justice issues through this international exchange.

Campus Headlines: https://www.ncue.edu.tw/p/406-1000-28618,r93.php?Lang=zh-tw



Figure 3: Faculty from NCUE's

Department of Guidance and
Counseling with the President and
interpreter (left to right): Professor

Deng Zhi-ping, interpreter
Professor Chiang Chao-mei,
President Christine Bhat, Professor
Zhao Shu-zhu



Figure 4: Professor Chiang Chaomei providing real-time translation of the lecture content

SDGs Relevance: Good Health and Well-being, Quality Education, Gender Equality, Reduced Inequalities, Peace, Justice and Strong Institutions, Partnerships for the Goals

3. The Department of Guidance and Counseling, College of Education, invited American dance therapist Dr. Eleanor DiPalma to conduct a two-day dance therapy workshop on June 8-9, 2024. The first day was "Dance Therapy × Personal and Professional Development" workshop (suitable for general student), and the second day was "Dance Therapy Group Supervision" workshop (suitable for practitioners). The dance therapy workshops expanded self-awareness and understanding through bodily movement, walking, and drawing, discussing the connection between body and communication, and invited participants to reconsider their relationship with their bodies. Campus Headlines: https://www.ncue.edu.tw/p/406-1000-27200,r93.php?Lang=zh-tw



28

Therapy × Personal and Professional Development" workshop "Dance Therapy Group Supervision" workshop



Figure 7: Group photo of participants of "Dance Therapy × Personal and Professional Development" workshop



Figure 8: Dancing while wearing masks

SDGs Relevance: Good Health and Well-being, Partnerships for the Goals

4. The Department of Special Education, College of Education, organized the "2024 Special Education Symposium: Inclusive Education and Practice." The Department of Special Education and NCUE's Special Education Center held the "2024 Special Education Symposium" with the theme "Inclusive Education and Practice" on June 22, 2024. This symposium specially invited NCUE's retired Honorary Professor Zhou Tai-jie from the Department of Special Education as the keynote speaker. The paper presentations attracted many graduate and doctoral students to submit papers, with research topics including: exploring career development of counseling personnel in university resource rooms, preparedness and competency needs of novice special education teachers in gender equality education core competencies, and sharing challenges faced by regular classroom teachers in inclusive education environments and examples of cross-professional team support. The moderators and commentators provided specific professional advice to presenters and considerable discussion and responses from participants were generated during the symposium.

Campus Headlines: https://www.ncue.edu.tw/p/406-1000-26718,r93.php?Lang=zh-tw



2024

Figure 9: Dean Huang Zong-jian of College of Education delivering opening remarks

Figure 10: Poster of the symposium



Figure 11: 2024 College of Education Special Education Symposium



Figure 12: Group photo with participants after the keynote speech

SDGs Relevance: Good Health and Well-being, Quality Education, Reduced Inequalities, Peace, Justice and Strong Institutions, Partnerships for the Goals

5. Professor Hu Chin-ping from the Department of Physics collaborated with the South Taiwan Observatory to organize the "Symposium for Early Career Astronomers (SECA)." SECA is held for young astronomers/astrophysicists in Taiwan to learn from and exchange with each other. The symposium invited experienced teachers to share professional experiences, such as research projects, teaching, or career advice, assisting young astronomical newcomers in research proposal writing, student guidance and teaching, community outreach and service, providing intergenerational experience sharing and discussion.

Related website: https://sites.google.com/phys.nchu.edu.tw/seca-iii/

SDGs Relevance: Quality Education, Industry, Innovation and Infrastructure

6. Professor Hu Chin-ping from the Department of Physics collaborated with the Astronomical Society of the Republic of China to organize the "2024 Astronomical Conference." The 2024 Annual Conference of the Astronomical Society of the Republic of China was held at National Changhua University of Education from May 31 to June 2, 2024. This is an annual gathering for domestic

astronomy workers to present new research discoveries and work achievements, and also a suitable venue for exchanging research insights or negotiating research collaborations. The conference brought together all oral presentations and poster papers related to astronomy and astrophysics research, astronomical education, and astronomical outreach work (such as clubs, community colleges, planetariums, science museums). This conference invited two foreign scholars, including Dr. Rebecca Bernstein (Giant Magellan Telescope Organization) and Professor Cynthia Chiang (McGill University) to give keynote speeches.

Campus Headlines: https://www.ncue.edu.tw/p/406-1000-26421,r93.php?Lang=zh-tw Related website: https://asroc.org.tw/asroc2024/



Figure 13: President Jiang Guo-Xing presenting a commemorative gift, appreciating the strong support from NCUE



Figure 14: Presentation of "Changhua Asteroid" plaque

SDGs Relevance: Quality Education, Decent Work and Economic Growth, Industry, Innovation and Infrastructure

7. Professor Hu Chin-ping from the Department of Physics collaborated with Academia Sinica, National Tsinghua University, and National Ilan University to organize the "Localization of fast radio bursts in Taiwan 2024" symposium. This project was jointly organized by NCUE with Taiwan's Academia Sinica of Astronomy and Astrophysics, National Taiwan University, National Tsinghua University, and other institutions, providing an ideal platform for discussing future collaborations among FRB research institutions, with the goal of maximizing scientific outcomes in the coming years.

In recent years, studies of fast radio bursts (FRBs) have been attracting a lot of attention, due to the observational challenges of localization of their origin. Recently the Taiwanese FRB community launched a new FRB telescope project: the Bustling Universe Radio Survey Telescope in Taiwan (BURSTT), which is led by Prof. Ue-Li Pen from the Institute of Astronomy and Astrophysics, ASIAA in Taiwan. The BURSTT project is a collaboration of Academia Sinica Institute of Astronomy and Astrophysics (ASIAA), National Chung-Hsing University (NCHU), National Taiwan University (NTU), and National Tsing-Hua University (NTHU). Therefore, we hope that

this conference would also be an ideal place to discuss future collaborations among FRB facilities to maximize the science outcome in the coming years.

Related website: https://events.asiaa.sinica.edu.tw/workshop/20240624/

SDGs Relevance: Good Health and Well-being

8. Professor Duan Xiao-lin from the Graduate Institute of Science Education organized the "2024 International Conference of Scientific Literacy in Taiwan." This conference was held on May 25, 2024, with participants including university professors, primary and secondary school teachers and teacher trainees, graduate students, high school students, international exchange students, members of Science Education Steering Committee, and representatives of MOE, totaling over 100 attendees. This conference brought together top domestic experts and scholars through keynote speeches on "International Trends in Science Education and Assessment," thematic forums on "Short-term Goals of Science Education and Extension and Exploration of International Scientific Literacy" and paper presentations on "Issues Related to International Scientific Literacy," promoting mutual exchanges among teachers from elementary school to university, enabling schools at all levels to work together and connect with international standards when implementing new curricula, enhancing overall understanding and international scientific literacy, and improving international scientific literacy.

Campus Headlines: https://www.ncue.edu.tw/p/406-1000-26129,r93.php?Lang=zh-tw

Official website: https://shs.k12ea.gov.tw/site/sesc



Figure 15: Activity highlights



Figure 16: Forum "Short-term Goals of Science Education and Extension and Exploration of International Scientific Literacy"

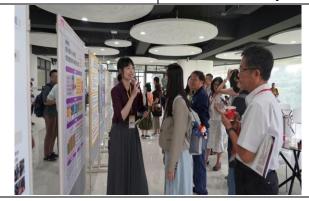


Figure 17: Poster presentation

- SDGs Relevance: Quality Education, Gender Equality, Reduced Inequalities, Partnerships for the Goals
- 9. Professor Duan Xiao-lin from the Graduate Institute of Science Education organized the "2024 International Scientific Literacy vs Science Education Short-term Goals Promotion Forum." The "2024 International Scientific Literacy vs Science Education Short-term Goals Promotion Forum", which was commissioned by the K-12 Education Administration, MOE. The forum was held on September 6, 2024, gathering over 60 science education experts, scholars, and National Museum of Natural Science representatives from across the nation, and providing concrete guidance for teaching practices. Under the trend of globalization, international scientific literacy has gradually become an important standard for educational assessment. At this forum, participants deeply explored how to enhance students' scientific literacy through education, especially how to apply this knowledge and skills in practical teaching to address global challenges.

Campus Headlines: https://www.ncue.edu.tw/p/406-1000-27402,r93.php?Lang=zh-tw



SDGs Relevance: Quality Education, Gender Equality, Reduced Inequalities, Partnerships for the Goals

10. Science Education Steering Committee, Graduate Institute of Science Education, College of Science, NCUE organized the "2024 International Scientific Literacy vs Science Education Short-term Goals Promotion Forum: Assessment and Application." This forum was held on October 18, 2024, gathering over 50 participants across the nation, including representative teachers of science education counseling team, science teachers of primary and secondary school and graduate students, members of Science Education Steering Committee, and representatives of MOE. The forum's purpose was to promote the implementation of science education short-term goals and understanding of international scientific literacy, implementing them in classroom assessment and teaching applications. Participants unanimously agreed that the implementation of international

scientific literacy can effectively enhance students' scientific literacy through assessment design and teaching applications.

Campus Headlines: https://www.ncue.edu.tw/p/406-1000-28051,r93.php?Lang=zh-tw

Official website: https://shs.k12ea.gov.tw/site/sesc



Figure 20: Over 50 science education-related personnel across the nation attended, with a full house.



Figure 21: Group photo of all participants.



Figure 22: The member of the Science Education Steering Committee,
Professor Lin Huan-Xiang presenting "Teaching and Assessment of
International Scientific Literacy."

SDGs Relevance: Quality Education, Gender Equality, Reduced Inequalities, Sustainable Cities and Communities, Partnerships for the Goals

11. Science Education Steering Committee, Graduate Institute of Science Education, College of Science, NCUE organized the "2024 International Scientific Literacy vs Science Education Short-term Goals Promotion Forum: Legacy and Future of International Scientific Literacy for Domestic Science Education Research." This forum was held on December 7, 2024, in conjunction with the 40th Annual International Conference of Science Education in Taiwan, gathering central and local representative teachers of science education counseling team, science teachers of primary and secondary school, graduate students, members of Science Education Steering Committee, and representatives of MOE. The panelists discussed the evolution of definitions of PISA scientific literacy and their inspiration for Taiwan's research and teaching practices in science education, culminating in how the promotion of teaching practices connects with the short-term goals of the

Science Education Steering Committee. This forum not only promoted exchanges among national science education-related centers and enhanced domestic students' scientific literacy, but also demonstrated the influence of College of Science, NCUE, in promoting domestic science education.

Campus Headlines: https://www.ncue.edu.tw/p/406-1000-28838,r93.php?Lang=zh-tw

Official website: https://shs.k12ea.gov.tw/site/sesc



Figure 23: The highlight of the conference.



Figure 24: Group photo of all participants.

SDGs Relevance: Quality Education, Gender Equality, Reduced Inequalities, Sustainable Cities and Communities, Partnerships for the Goals

12. The College of Technology at NCUE organized the "TSTP 2024 The 11th Taiwan Symposium On Technology of Plasticity" with the Taiwan Society for Technology of Plasticity. This symposium was held on December 6, 2024, not only focusing on the latest developments in plastic processing technology but also exploring integration of intelligent manufacturing, allowing participants to discuss innovations and challenges in the field of plastic processing. Through the sharing of wisdom and experience from various sectors, the symposium aimed to further advance the development of the plastic processing field. This initiative not only helps enhance plastic processing technology applications but also creates a platform for in-depth dialogue between academia and industry, enabling academic research to be effectively applied to actual production and promoting the advancement of Taiwan's plastic processing technology while deepening research and development collaboration between academia and small and medium enterprises.

Campus Headlines: https://www.ncue.edu.tw/p/406-1000-28898,r93.php?Lang=zh-tw

SDGs Relevance: Quality Education, Decent Work and Economic Growth, Industry, Innovation and Infrastructure

13. Graduate Institute of Human Resource Management, College of Technology, NCUE and the Taiwan Strategy and Performance Management Association organized the "2024 Strategy & Performance Management Conference". This conference was held on June 29, 2024, attracting nearly 300 professionals from various fields, with scholars from Thailand, China, and other

countries participating. The conference encouraged researchers to combine theory and practice to achieve academic and practical exchanges, with particular focus on issues of carbon emission reduction and carbon neutrality. Since carbon emission reduction is a global trend, the conference invited over 30 companies to explore popular topics such as key talent management and global carbon emissions. NCUE will continue to promote related research and actively participate in international cooperation to bring more substantial contributions to society.

Campus Headlines: https://www.ncue.edu.tw/p/406-1000-26570,r93.php?Lang=zh-tw

14. Professor Lian Yi-bin from the Department of Mathematics, College of Science, collaborated with The General Association of the Scouts of China (Taiwan) to organize the promotion activity: "2024 Scout Bilingual Board Game Sharing". This activity combined bilingual education with the promotion of scout spirit, and served as preparation and training for the upcoming 2029 World Scout Moot. Through the fun board game, the activity helped participants learn English while playing games and enhance scout knowledge, cultivating future bilingual scout seed teachers. The on-site activities further cultivated participants' awareness of ecological observation, cultural history, and other aspects, promoting the inheritance and growth of scout culture. This not only laid a solid foundation for future bilingual scout promotional activities but also further combined scout spirit with bilingual education and continued promoting it to more educational fields. Related website: https://www.facebook.com/groups/154896931778590/posts/1576664346268501/

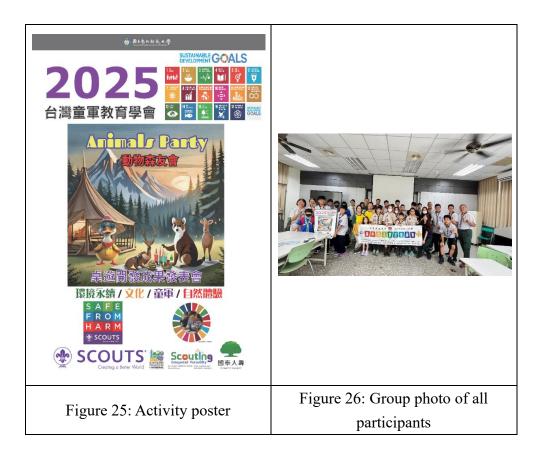




Figure 27: Activity highlights

SDGs Relevance: Quality Education, Gender Equality, Sustainable Cities and Communities, Partnerships for the Goals

15. Professor Chu Xiang-jun from the Department of English organized the "18th International Conference on e-Learning & Innovative Pedagogies." E-Learning has become a new trend in 21st-century teaching and learning. This conference brought together educators, researchers, policymakers, and industry experts around the world to share insights, exchange ideas, and explore best practices related to e-learning technologies, AI-driven solutions, and innovative pedagogies. Not only emphasizing the potential of e-learning technologies, this conference also focused on the growing importance of AI in education, providing in-depth understanding of using AI-driven tools to supplement traditional teaching methods and optimize online learning environments. In this way, educators may gain scalable solutions to address challenges of today, inspire new ideas, build global partnerships, and support AI-driven educational innovation. See Appendix 17.2.2-A for more details.



Figure 28: Activity poster.

SDGs Relevance: Quality Education, Partnerships for the Goals

16. Professor Li Zong-xin from the Graduate Institute of History organized the "20th Anniversary of Graduate Institute of History at NCUE and 7th Baisha International Conference on Historical Geography - Results and Applications of the Spatio-Temporal Search System for Land Declaration Documents." This conference was held on November 23-24, 2024, inviting scholars of historical geography from the industry, government, and academia to participate. The conference featured the first presentation of Hakka cultural and historical digital project results, primarily using geographic information systems (GIS) to build Hakka cultural and historical databases, enhancing the quality and quantity of academic research in the Taoyuan-Hsinchu-Miaoli region, and analyzing historical memories between people and land through convenient and precise data search.

Campus Headlines: https://www.ncue.edu.tw/p/406-1000-28724,r93.php?Lang=zh-tw



Figure 29: From left to right:
Hsuan-Ming Liao, Secretary-General
of the Taiwanese Association for
Digital Humanities; Chung-Hsin Li,
Director of the Graduate Institute of
History at NCUE; Chin-Liang Ho,
Director of the Hakka Culture
Development Center; Da-Chian Jan,
Deputy Director of the Research
Center for Humanities and Social
Sciences, Academia Sinica

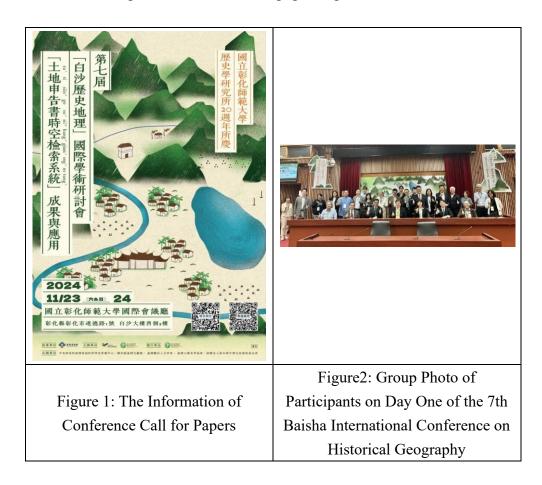
Figure 30: Group photo of participants on the first day of the 7th Baisha International Conference on Historical Geography

SDGs Relevance: Quality Education

SDG 17.2.3 International collaboration data gathering for SDG

NCUE engages in international cooperation through organizing and participating in international conferences to conduct relevant research, achieving the policy objectives of sustainable development through internationalization. The following outlines seven international cooperation conferences or invited foreign scholar exchange lectures held by NCUE in 2024:

1. The Graduate Institute of History at NCUE organized the 7th Baisha International Conference on Historical Geography on November 23-24, 2024. The conference featured 13 papers covering topics including "Results and Applications of the Spatio-Temporal Search System for Land Declaration Documents," "Medical and Biographical Writing from the Perspective of Public History," "Mountain Management, Survey and Ethnic Migration," and "Central Taiwan Agricultural and Commercial Development and Family Networks." The conference shared the implementation results of the land declaration search database construction project, providing convenient and precise data retrieval to analyze the historical memory between people and land. Campus Headlines: https://www.ncue.edu.tw/p/406-1000-28724,r93.php?Lang=zh-tw



SDGs Relevance: Quality Education, Partnerships for the Goals

2. The Community Psychological Counseling and Potential Development Center at NCUE hosted the "Embodied Imagination®: Emergence, International Conference of Dialogue with Embodied Imagination® Among Multiple Professionals" from July 31 to August 4, 2024. This

conference focused on image embodiment and cross-professional dialogue and practical experience, conducting in-depth dialogue on image embodiment and its diverse cross-professional applications in "AI Artificial Intelligence, Psychotherapy and Art, and Healthcare." Campus Headlines: https://www.ncue.edu.tw/p/406-1000-27757,r93.php?Lang=zh-tw





Figure 3: Promotional Poster

Figure 4: The Keynote Speech of "Artificial Intelligence (AI) and Embodied Imagery (EI)"



Figure 5: "Generative AI Emotional Companion System and Text Emotion Recognition" Forum



Figure6: Mind Tea Ceremony
Experience

SDGs Relevance: Quality Education, Partnerships for the Goals

3. Professor Teng Te-Chun from the Department of Computer Science and Information Engineering organized EAI SGIoT 2024 - 8th EAI International Conference on Smart Grid and Internet of Things, collaborating with international experts in related fields to exchange important issues about smart grids and IoT, helping to achieve national emerging technology industry development goals, and serving as a Steering Committee member during the conference. Event Website: https://sgiot.eai-



SDGs Relevance: Industry, Innovation and Infrastructure, Partnerships for the Goals

4. Christine Suniti Bhat, President of the American Counseling Association (ACA) in 2024, visited NCUE for a keynote speech. The president emphasized the impact of cybercrime on young generations, particularly noting that cyberbullying and sexting have become prevalent phenomena. She called upon counseling professionals to understand the operations of online platforms and social networking sites; while educating young people on safe social media usage and empathizing with victims to help them understand they are not at fault, thereby reducing shame. The speech provided a deep understanding of the harmfulness of cyberbullying and sexual image transmission, prompting reflection that seemingly minor online attacks can have serious consequences, which makes prevention and proactive responses to cyberbullying and pornographic influence transmission issues particularly important. Campus Headlines: https://www.ncue.edu.tw/p/406-1000-28618,r93.php?Lang=zh-tw



President Chiang

- SDGs Relevance: Good Health and Well-Being, Quality Education, Gender Equality, Reduced Inequalities, Peace, Justice and Strong Institutions, Partnerships for the Goals
- 5. The Department of Guidance and Counseling in the College of Education invited American dance therapist Dr. Eleanor DiPalma to conduct a dance therapy workshop on June 8-9, 2024. Through body movement, walking, and drawing, participants expanded their self-awareness and understanding while discussing the connection between body and communication, and to reconsider their relationship with their bodies. Participants provided feedback in the questionnaire: "Dance allowed me to follow my heart freely, letting passion from deep within flow through me. This is an overflowing surge that gently and softly supports me, accompanies my timidity, encourages my bravery, and teaches me acceptance." "Thank you for bringing such a unique experience, in a space, atmosphere, and interpersonal relationship that made me feel safe, bathing my body and self to music and body rhythm, interacting and connecting with the world and others. The most important thing is that I am able to connect with my authentic self within the musical atmosphere and movement." Campus Headlines: https://www.ncue.edu.tw/p/406-1000-27200,r93.php?Lang=zh-tw



Figure 11: Dancing with Masks



Figure 12: Participants Using Scarves for Mirroring Practice

SDGs Relevance: Good Health and Well-Being, Quality Education, Partnerships for the Goals

6. NCUE collaborated with the Astronomical Society of the Republic of China to organize the "ASROC 2024 Annual Meeting," at NCUE from May 31 to June 2, 2024. The annual meeting encompassed various activities, including the general assembly, 64 oral presentations covering astronomical science and science education outreach, and 104 poster presentations. Two keynote speakers were invited: Dr. Rebecca Bernstein from the Giant Magellan Telescope Organization and Professor Cynthia Chiang from McGill University, providing participants with rich astronomical academic gains. Website: https://asroc.org.tw/asroc2024/



Figure 13: The Poster of 2024 ASROC Annual Meeting

SDGs Relevance: Good Health and Well-Being, Quality Education, Partnerships for the Goals

7. Inviting Dr. Bernard Frank Rolfe from Deakin University, Australia, for a campus lecture: Dean Lai Yung-Ling of the College of Engineering at NCUE invited Dr. Bernard Frank Rolfe from Deakin University, Australia, to deliver keynote lectures from May 23-25, 2024, discuss international bilateral cooperation, and attend the 2024 Conference on Precision Machinery and Manufacturing Technology, engaging in discussions and exchanges with experts and scholars from various countries.

SDGs Relevance: Good Health and Well-Being, Quality Education, Partnerships for the Goals

SDG 17.2.4 Collaboration for SDG best practice

NCUE actively organizes international exchange activities related to SDGs within the university. Relevant administrative units and faculty members promote the implementation of sustainable development goal policies through participation in various international cooperation and exchange affairs. The following lists 9 international exchange activities conducted by NCUE in 2024:

1. NCUE's Office of International Affairs promotes the ASEAN and South Asia Program: In collaboration with the Philippines, Thailand, India, Indonesia, Malaysia, and other countries, NCUE implements strengthened national cooperation and exchange programs to promote substantial cross-border exchanges and achieve the vision of mutually beneficial talent cultivation and regional economic development. This includes providing experience and visits in science, technology, and cultural courses; promoting Southeast Asian language and cultural learning programs; and fostering the cultivation of Taiwan's ASEAN and South Asian academic, cultural, and economic talent to enhance mutual talent complementarity and resource sharing, achieving the goal of reciprocal cooperation in international educational resources.

SDGs Relevance: SDG 4 Quality Education, SDG 10 Reduced Inequalities, SDG 17 Partnerships for the Goals



Figure 1: Academic exchange with faculty from University of the Philippines



Figure 2: Academic exchange and cooperation with IIT Gandhinagar, India



Figure 3: Students and faculty from



Figure 4: Organizing corporate

Thaksin University, Thailand visiting NCUE

visits for international students

2. The representatives from two Indonesian Universities Visited NCUE: Dr. Hj. Dewi Indriani Jusuf, President of International Women University (IWU), Indonesia, and Dr. Hj. Umi Narimawati, Vice President of Universitas Komputer Indonesia (UNIKOM), a sister university, jointly led delegations to visit NCUE in early May 2024. Both parties discussed promoting student exchanges and jointly advancing educational and academic cooperation. Dean Huang Qi-yan of the College of Science and Assistant Professor Lee Chien-hsing from the Department of Mechatronics Engineering actively participated, representing the International Master's Program in Materials and Biotechnology & Science Education of the College of Science, and the International Master's Program in Engineering of the College of Engineering, respectively. They engaged in in-depth discussions with guests regarding cooperation programs, reached consensus on promoting dual degree programs, and preliminarily completed complex curriculum comparison work while finalizing relevant cooperation details. This exchange not only helps Indonesian students become internationally competitive professionals but also expands NCUE's academic exchange relationships with Indonesia, attracting more outstanding local students to study at NCUE. Campus Headlines: https://www.ncue.edu.tw/p/406-1000-25949,r93.php?Lang=zh-tw

SDGs Relevance: SDG 4 Quality Education, SDG 17 Partnerships for the Goals



Figure 5: Dr. Hj. Dewi Indriani
Jusuf, President of International
Women University, Indonesia (third
from right) and Dr. Hj. Umi
Narimawati, Vice President of
Universitas Komputer Indonesia
(fifth from left) jointly leading the
visiting delegation



Figure 6: Group photo of participating faculty and distinguished guests

3. Japan's Yamato Housing provides internship opportunities for NCUE students: NCUE signed a

cooperation memorandum with Yamato Housing Co., Ltd. of Japan in November 2024. Yamato Housing provides internship opportunities for NCUE students, teaching them construction techniques and architectural concepts, while expecting to gain fresh perspectives and creativity through the cultural backgrounds and customs of interns. Through international industry-academia cooperation and internship arrangements, students' innovative thinking can be stimulated, integrating academic learning with practical application, promoting mutual benefit and win-win situations for students and enterprises. We look forward to expanding more cooperation opportunities in the future, enabling NCUE to seamlessly connect with international and industry sectors, cultivating more professional talent. Campus Headlines: https://www.ncue.edu.tw/p/406-1000-28757,r93.php?Lang=zh-tw



Figure 7: NCUE Vice President and Chairman of Japan's Yamato Housing signed the memorandum

SDGs Relevance: SDG 4 Quality Education, SDG 8 Decent Work and Economic Growth, SDG 17 Partnerships for the Goals

4. The President of KMUTT, a flagship university in Thailand, visited the College of Technology at NCUE, where both parties collaborated to facilitate a student internship program: As NCUE's sister university. KMUTT emphasizes research and innovation, cultivating human resources with practical skills through industry-academia integration programs cooperating with local and international industries. Both parties have established consensus that KMUTT will provide valuable overseas internship opportunities for NCUE students in the future. NCUE also continues to encourage faculty through the TEEP program to recruit outstanding KMUTT students to join research teams. This not only deepens the partnership between the two universities but also opens additional channels for students from both sides to study abroad, strengthening international professional experience with fruitful results. Campus Headlines: https://www.ncue.edu.tw/p/406-1000-28683,r93.php?Lang=zhtw



Figure 8: Dean of College of Technology at NCUE exchanging gifts with KMUTT President

SDGs Relevance: SDG 4 Quality Education, SDG 8 Decent Work and Economic Growth, SDG 17 Partnerships for the Goals

5. NCUE's Office of International Affairs and Department of Fine Arts signed an international art exchange project cooperation agreement with the UK non-profit arts organization Something Useful Project (SUP) on October 21, 2024. The cooperation activities will begin in March 2025, inviting 2 British artists to NCUE for artist residency and academic exchange activities. In autumn 2025, 2 NCUE faculty members and 2 Fine Arts students will be invited to Salford University in the UK for academic exchange. We look forward to sustainable operation and long-term cooperation through this international exchange activity, bringing more mutual learning and interaction opportunities for faculty and students from both institutions. Campus Headlines: https://www.ncue.edu.tw/p/406-1000-28437,r93.php?Lang=zh-tw



Figure 9: Both parties exchanging contracts



Figure 10: Group photo of participating faculty and distinguished guests

SDGs Relevance: SDG 16 Peace, Justice and Strong Institutions, SDG 17 Partnerships for the Goals 6. College of Education at NCUE administrators visit Fukuoka University of Education, Japan for exchange: During this visit, both parties conducted in-depth exchanges regarding their respective teacher training curricula and faculty research focuses. NCUE faculty not only understood Fukuoka

University of Education's unique approaches and innovative models in special education but also gained deeper recognition of the university's outstanding achievements in teacher training. Particularly, as this university is also one of NCUE's sister schools, both parties have maintained close interaction in student exchanges and academic cooperation over the long term. We hope that through this on-site visit by College of Education faculty, substantial interaction and exchange between both parties will be promoted, opening opportunities for more academic cooperation and practical issue discussions in the future. Campus Headlines: https://www.ncue.edu.tw/p/406-1000-27401,r93.php?Lang=zh-tw



Figure 11: College of Education faculty group photo with Fukuoka University of Education President and other faculty



Figure 12: College of Education faculty visiting Fukuoka University of Education's teaching environment

SDGs Relevance: SDG 4 Quality Education, SDG 17 Partnerships for the Goals

7. Professor Chang Chia-chang from the Graduate Institute of Sports and Health implements the Ministry of Sports "New Southbound Policy for Sports - School Sports Exchange Guidance Program": In coordination with the Ministry of Sports' implementation of New Southbound talent cultivation promotion policy, NCUE is entrusted to implement the "New Southbound Policy for Sports - School Sports Exchange Guidance Program," providing guidance for sports teams from various educational levels to visit and exchange with New Southbound countries, and inviting New Southbound countries to Taiwan for sports competition exchanges. This aims to encourage students and teachers with sports expertise from various educational levels to actively participate in international sports affairs, cultivating international mobility. This program vitalizes exchanges and cooperation between Taiwan and New Southbound countries' schools at all levels in sports curriculum and teaching, sports training, sports faculty, and talent cultivation. The 2024 implementation results are as follows: (1) Approved categories: A. Bidirectional exchange of school sports visits: 39 cases subsidized, benefiting 4,251 people. B. Bidirectional exchanges: 15 cases subsidized, benefiting 3,503 people. (2) Exchange items and countries: Football, basketball, and

badminton were most common; Thailand, Malaysia, and Vietnam were the most frequent exchange countries.

Table 1: NCUE's Implementation Results of the Sports Administration's "2024 New Southbound Policy for Sports - School Sports Exchange Guidance Program"

Category	Cases	People
School Sports Team Bidirectional Exchange	242	4,251
School Sports Visit Bidirectional Exchange	39	476
Sports Competition Exchange	15	3503
Subtotal	296	8230



Figure 13: The badminton team of Kaohsiung Municipal Hsin Chung Senior High School participating in competitions and training camp exchange program in Malaysia



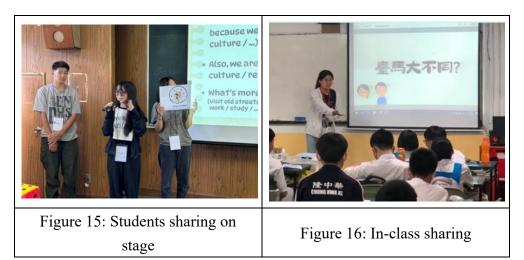
Figure 14: The Taekwondo team Taoyuan Municipal Pingjen Senior High School training in Thailand

SDGs Relevance: SDG 3 Good Health and Well-being, SDG 4 Quality Education, SDG 17 Partnerships for the Goals

- 8. NCUE organizes the 2024 Overseas Internship, selecting outstanding students for overseas internships:
 - (1) Associate Professor Wang Zhi-hong from the Graduate Institute of Guidance and Counseling selected 5 students for a one-month internship at Chong Hwa Independent High School in Kuala Lumpur, Malaysia, through the project "Competency-oriented Curriculum and Teaching Practice in Malaysian Chong Hwa Independent High School".
 - (2) Professor Wang Min-hsing from the Graduate Institute of Rehabilitation and Counseling selected 3 students for a two-month internship at Virginia Commonwealth University, USA, through "NCUE and US Sister University Cooperation Rehabilitation Counseling Internship Program".
 - (3) Assistant Professor Chen Hsieh-chun from the Graduate Institute of Technology and Adolescent English selected 6 students for a two-month internship at Smart Informatics Ltd. in Canada, through the project "Creative Convergence: Course Game Map Development, Drawing and

Video Production Integrating ADDIE and Design Thinking,"

(4) Assistant Professor Kuo Yu-hsien from the Department of English's selected 5 students for a one-month internship at DASH Corporation's Aso Youth House in Japan, through "NCUE Summer Internship Program in Aso, Japan".



SDGs Relevance: SDG 4 Quality Education, SDG 17 Partnerships for the Goals

9. NCUE implements the 2024 Global Mandarin AI Program, recommending Chinese language teaching assistants for internship programs in Indonesia. A total of 5 students were selected to serve as Mandarin teaching assistants at Carnegie Technical Institute in Indonesia. During this period, they guided Mandarin courses at elementary, middle, high school, and university levels at Carnegie Technical Institute. Through teaching Mandarin, they achieved the educational goal of mutual learning and growth with students.



Figure 17: Course stage

SDGs Relevance: SDG 4 Quality Education, SDG 17 Partnerships for the Goals

SDG 17.2.5 Collaboration with NGOs for SDGs

NCUE actively collaborates with non-governmental organizations through cross-unit exchanges, organizing promotional activities, serving in key leadership positions, and jointly executing projects to achieve sustainable development policy goals. The following lists 10 items of collaboration and exchange between NCUE faculty and non-governmental organizations (NGOs) in 2024:

1. NCUE collaborated with the Kao Family Education Foundation to organize the 2024 Yeang Wang Cup National Science HomeRun Competition. The competition encourages students to engage in design thinking and project implementation using Arduino. The preliminary round is evaluated based on concept proposal documents, the semi-final requires submission of project description documents and demonstration videos, and finalists must bring their practical works to the venue for demonstration and present their projects to judges with Q&A sessions. Through collaboration with non-governmental organization resources, this initiative stimulates student's creativity, integrates interdisciplinary knowledge, and solves natural science problems. In 2024, nearly 800 secondary school teachers and students from 18 counties and cities nationwide participated. Related website: https://www.youtube.com/watch?v=k20d_FetU5E

SDGs Relevance: Quality Education, Decent Work and Economic Growth, Industry, Innovation and Infrastructure



Figure 1: 2024 Yeang Wang Cup National Science HomeRun Competition Site



Figure 2: 2024 Yeang Wang Cup National Science HomeRun Competition Award Ceremony

2. NCUE was commissioned by the Industrial Technology Research Institute to execute carbon inventory projects. To align with global greenhouse gas net-zero emission policies, NCUE provided professional services for greenhouse gas inventory and reduction to manufacturers in 2024, assisting industries in low-carbon transformation. The project comprised 16 cases with a total execution amount of NT\$3.38 million, involving 13 faculty members, making substantial contributions to net-zero emission policies.

Table 1: 2024 Carbon Inventory Project Details

No.	Principal Investigator	Amount (NTD)	Collaborating Organization(s)
110.	1 Thicipal Investigator	rimount (1(1D)	Industrial Technology Research Institute /
1	Wang, Wei-Long	200,000	Yiershuen Enterprise Co, Ltd
	I. T. C1.	200.000	Industrial Technology Research Institute /
2	Lin, Tsung-Chi	200,000	Chin Chin Sheng Industrial Co., Ltd.
2	E CI II.	200,000	Industrial Technology Research Institute /
3	Fang, Chun-Hsiu	200,000	Wei Jheng Machinery Co., Ltd
4	H W.T	200,000	Industrial Technology Research Institute /
4	Huang, Wei-Tse	200,000	Chung Wei Industrial Co., Ltd.
_	777 TT ' 777	200,000	Industrial Technology Research Institute /
5	Wang, Hsin-Wen	200,000	Huang Wei Metal Industrial Co., Ltd.
			Industrial Technology Research Institute /
6	Wang, Hsin-Wen	200,000	Huang Wei Precision Machinery Industrial
			Co., Ltd.
7	Wana Hain Wan	200,000	Industrial Technology Research Institute /
7	Wang, Hsin-Wen	200,000	Hung Cheng Hardware Co., Ltd.
8	Wong Hain Won	200,000	Industrial Technology Research Institute / Jie
0	Wang, Hsin-Wen	200,000	Yi Sing Enterprise, Ltd.
9	Pai, Fan-Yun	200,000	Industrial Technology Research Institute /
9	Fai, Faii-Tuii	200,000	Ming Jiang Precision Co., Ltd.
10	Chung, Kuan-Jung	200,000	Industrial Technology Research Institute /
10	Chung, Kuan-Jung	200,000	Dyi Er Kang Enterprise Co., Ltd.
11	Lai, Yung-Ling	200,000	Industrial Technology Research Institute /
11	Lai, Tung-Ling	200,000	Tsun Yi Hsing Industrial Co., Ltd.
12	Hsieh, Ping-Cheng	200,000	Industrial Technology Research Institute /
12	risicii, i ilig-chelig	200,000	Sucoot Co., Ltd.
13	Wang, Hsin-Wen	380,000	Industrial Technology Research Institute /
13	,, ang, 115m- wen	500,000	Chiao Ren Laser Industry Co. Ltd
14	Wang, Wei-Long	200,000	Industrial Technology Research Institute
15	Chen, Te-Fa	200,000	Metal Industries Research & Development
1.5	C11011, 10-1 a	200,000	Centre /Chain We Machinery Co., Ltd.
16	Chen, Ti-Cheng	200,000	Metal Industries Research & Development
10	Chon, 11 Chong	200,000	Centre /Ben-Sheng Industrial Co., Ltd.

SDGs Relevance: Good Health and Well-being, Quality Education, Decent Work and Economic Growth, Industry, Innovation and Infrastructure

3. Professor Kai-Chao Yao from the Graduate Institute of Technological and Vocational Education serves as a director of the Kenda Cultural and Educational Foundation, assisting in planning and implementing scholarships for underprivileged students and organizing summer science camps for elementary and secondary school students. Kenda Cultural and Educational Foundation: https://kenda.org.tw/autism/



Figure 3: Elementary and
Secondary School Summer Camp
Activities



Figure 4: Scholarship Award Ceremony for Underprivileged Students

SDGs Relevance: No Poverty, Zero Hunger, Good Health and Well-being, Quality Education, Reduced Inequalities, Sustainable Cities and Communities

4. Multiple NCUE faculty members serve as executive directors, directors, alternate directors, and supervisors in the 5th term of the International Society of Mechanical and Electrical Technology (ISME), assisting in management and promoting domestic and international academic research and conference activities. Executive Director: Professor Chieh-Hsien Yang, Graduate Institute of Vehicle Technology Directors: Professor Ming-Fei Chen, Department of Mechanical and Electrical Engineering; Professor Wei-Tse Huang, Department of Electrical and Mechanical Technology Alternate Director: Professor Jin-Jia Liu, Department of Electrical and Mechanical Technology Supervisor: Professor Kai-Chao Yao, Graduate Institute of Technological and Vocational Education Society website: https://ismetek.org/

[ISME] 5th Term Directors and Supervisors Election Results: https://ismetek.org/zh_tw/news/%C2%A0%E2%96%BA%5B-ISME-%5D%C2%A0%E7%AC%AC%E4%BA%94%E5%B1%86-%E7%90%86-%E7%9B%A3%E4%BA%8B-%E9%81%B8%E8%88%89%E7%B5%90%E6%9E%9C%E5%90%8D%E5%96%AE%0D%0A%C2%A0-%C2%A0-%C2%A0-2024-04-26-%E5%B7%B2%E6%8E%A1%E5%AF%A6%E9%AB%94%E6%8A%95%E7%A5%A8-85729182SDGs Relevance: Quality Education, Decent Work and Economic Growth, Industry, Innovation and Infrastructure, Partnerships for the Goals

5. Professor Di-Cheng Chen from the Department of Electrical and Mechanical Technology serves as a director of the Taiwan Society for Technology of Plasticity and participated in the 2022 and 2023

Taiwan Symposiums on Technology of Plasticity. During the conferences, he was selected as the chairman of the 2024 Taiwan Symposium on Technology of Plasticity.

TSTP 2024 Committee: https://sites.google.com/view/taiwantstp/symposium/the-11th-taiwan-symposium-on-technology-of-plasticity/committee-2024?authuser=0

- SDGs Relevance: Good Health and Well-being, Quality Education, Decent Work and Economic Growth, Industry, Innovation and Infrastructure, Responsible Consumption and Production
- 6. Professor Er-Tsung Chin from the Graduate Institute of Science Education serves as a director in the 8th and 9th terms of the Taiwan Association for Mathematics Education, participating in board meetings to plan and execute annual activities of the association to promote the advancement of mathematics education in Taiwan.

Taiwan Association for Mathematics Education: http://tame.tw/intro/super_pages.php?ID=intro2 SDGs Relevance: Quality Education

7. Professor Pei-Hsuan Wei from the Department of Public Affairs and Civic Education serves as Vice President of the Taiwan Association for Human Rights, assisting in planning and executing work related to human rights issues. Taiwan Association for Human Rights: https://www.tahr.org.tw/about/boardmember-and-consultant



Figure 5: Taiwan Association for Human Rights Vice President - Pei-Hsuan Wei

SDGs Relevance: Good Health and Well-being, Gender Equality, Affordable and Clean Energy, Reduced Inequalities, Sustainable Cities and Communities, Climate Action, Peace, Justice and Strong Institutions, Partnerships for the Goals

8. Professor Yen-Yi Liu from the Department of Biology serves as a director of the Taiwan Society of Microbial Ecology, assisting in liaising with domestic and international personnel, exchanging research insights, improving microbiology standards, and promoting academic research and development.



Figure 6: Certificate of Professor Yen-Yi Liu from the Department of Biology serving as director of the Taiwan Society of Microbial Ecology

SDGs Relevance: Good Health and Well-being, Clean Water and Sanitation, Climate Action, Life Below Water, Life on Land

9. Professor Yi-Bin Lien from the Graduate Institute of Statistics and Information Sciences serves as a Special Task Force member of the World Organization of the Scout Movement (WOSM), assisting in calculating fair membership fee systems for various countries based on population and GNI.



Figure 7: Professor Yi-Bin Lien from the Graduate Institute of Statistics and Information Sciences serving as WOSM Special Task Force member

SDGs Relevance: Good Health and Well-being, Quality Education, Gender Equality, Reduced

Inequalities, Responsible Consumption and Production, Peace, Justice and Strong Institutions, Partnerships for the Goals

10. Several faculty members from the University, including Professor Shu-Fen Lin, Professor Hsiao-Lin Duan, Professor Mei-Chun Wen, and Professor Sung-Pei Chien from the Graduate Institute of Science Education, as well as Professor Meng-Tzu Cheng from the Department of Biology, serve as directors on the 37th and 38th Boards of the Association of Science Education in Taiwan(ASET). Furthermore, Professor Mei-Chun Wen from the Graduate Institute of Science Education also serves as the Chair of the Awards Committee. They assist with the association's affairs, promote science education and public science popularization activities, and host various workshops to achieve the goals of enhancing teacher capacity and improving instruction.

Association of Science Education in Taiwan:

https://www.ase.org.tw/motion.asp?lgid=2&siteid=100495

37th Term (2027) Directors/Supervisors/Committee Members List:

http://www.ase.org.tw/motion.asp?menuid=14542&lgid=2&siteid=100495

38th Term (2025) Directors/Supervisors/Committee Members List:

https://www.ase.org.tw/motion.asp?menuid=14715&lgid=2&siteid=100495

SDGs Relevance: Quality Education, Reduced Inequalities

SDG 17.3 Publication of SDG reports

SDG1 No Poverty: https://sdg.ncue.edu.tw/p/412-1032-4392.php?Lang=en

SDG2 Zero Hunger: https://sdg.ncue.edu.tw/p/412-1032-4393.php?Lang=en

SDG3 Good Health and Well-being: https://sdg.ncue.edu.tw/p/412-1032-4394.php?Lang=en

SDG4 Quality Education: https://sdg.ncue.edu.tw/p/412-1032-4395.php?Lang=en

SDG5 Gender Equality: https://sdg.ncue.edu.tw/p/412-1032-4396.php?Lang=en

SDG6 Clean Water and Sanitation: https://sdg.ncue.edu.tw/p/412-1032-4397.php?Lang=en

SDG7 Affordable and Clean Energy: https://sdg.ncue.edu.tw/p/412-1032-4399.php?Lang=en

SDG8 Decent Work and Economic Growth: https://sdg.ncue.edu.tw/p/412-1032-4400.php?Lang=en

SDG9 Industry, Innovation and Infrastructure: https://sdg.ncue.edu.tw/p/412-1032-4401.php?Lang=en

SDG10 Reduced Inequalities: https://sdg.ncue.edu.tw/p/412-1032-4402.php?Lang=en

SDG11 Sustainable Cities and Communities: https://sdg.ncue.edu.tw/p/412-1032-4403.php?Lang=en

SDG12 Responsible Consumption and Production: https://sdg.ncue.edu.tw/p/412-1032-4404.php?Lang=en

SDG13 Climate Action: https://sdg.ncue.edu.tw/p/412-1032-4405.php?Lang=en

SDG14 Life Below Water: https://sdg.ncue.edu.tw/p/412-1032-4406.php?Lang=en

SDG15 Life On Land: https://sdg.ncue.edu.tw/p/412-1032-4407.php?Lang=en

SDG16 Peace, Justice and Strong Institutions: https://sdg.ncue.edu.tw/p/412-1032-4408.php?Lang=en

SDG17 Partnerships for the goals: https://sdg.ncue.edu.tw/p/412-1032-4409.php?Lang=en

SDG 17.4.1 Education for SDGs commitment to meaningful education

NCUE actively organizes various educational courses, workshops, and related activities to promote sustainable development for students to achieve the SDGs. These include relevant courses and activities offered by the General Education Center in collaboration with various campus units, as well as lectures to cultivate students' life literacy related to SDG. The Office of Academic Affairs has established the University Social Responsibility and Innovative Teaching Development Center to guide students in practicing university social responsibility and jointly implementing USR projects related to local industrial development and rural education guidance. Additionally, bilingual workshops are conducted to promote internationalization, and help students understand various SDG issues through guidance activities. These efforts are consolidated into six major categories as follows:

1. General Education Center of NCUE

- (1) Based on the spirit of literacy courses encompassing "Cultural Literacy," "Scientific Literacy," "Practice and Action," "Creative Thinking," "Civic Literacy," and "Global Village Mindset," core general education courses were offered in 2023, including "Marine Culture and Taiwan," "Introduction to Marine Life Sciences," "Green Energy Technology," "Water and Electricity Conservation and Modern Life," "Environmental Change and Human Civilization," "Spatial Greening Design," and "Changhua Studies." In addition to courses, 18 general education lectures were held, including "Macro Ecological Photography Techniques and Aesthetic Appreciation," "Crisis of Taiwan's Satoyama Environment," "Let's Create a Sustainable Living Circle," "Zero Waste Academy Activity Plan Turning Waste into Treasure for Green Living," and "Protecting Consumer Rights, Moving Towards Sustainable and Responsible Production and Consumption," with approximately 1,450 participants, enabling students to understand reliable and sustainable modern energy and increase awareness of protecting and sustainably utilizing marine resources.
- (2) To strengthen students' understanding of environmental sustainable development and enable hands-on experiential learning, diverse learning courses such as "Green Energy Technology," "Handcrafted Natural Solid Wood Night Lamp," and "Ecological and Macro Photography Aesthetic Appreciation and Practice" allowed students to fully experience the importance of sustainable development in environmental education.
- (3) In 2024, in coordination with national policies and current affairs, lectures or workshops on gender equality, suicide prevention, and self-exploration were organized, with participation expanded to administrative staff and graduate students, encouraging students to be more receptive and respectful of different cultural differences. Regarding the destigmatization of mental illness, one workshop and one lecture were held to provide students with extended knowledge and increase empathy. This will be expanded to NCUE faculty and administrative staff, organizing appropriate lectures, activities, and workshops under a comprehensive guidance model, aiming to benefit and develop more people with limited funding.

Detailed lists of general education lectures and diverse learning courses organized by various NCUE units are shown in Tables 1 and 2, with photos in Figures 1-5.

Table 1: List of General Education Lectures Organized by Various NCUE Units

Table 1. Elst of General Education Ecetures Organized by Vari	ous iveel e	
General Education Center	Date	Number of Participants
Macro Ecological Photography Techniques and Aesthetic Appreciation	2024/03/08	120
Field Study—Survival Against Adversity	2024/05/29	140
The Beauty and Value of Taiwanese Crafts	2024/10/16	120
Environmental Education Center	Date	Number of Participants
2024 Safety Education Promotion for Chemical Substances with Food Safety Risk Concerns - Baoshan Session	2024/03/12	85
2024 Safety Education Promotion for Chemical Substances with Food Safety Risk Concerns - Jinde Session	2024/03/12	85
2024 "Zero Waste Academy Activity Plan - Turning Waste into Treasure for Green Living"	2024/05/09	85
Student Affairs Office	Date	Number of Participants
[Fo Guang Youth Association General Education Lecture] Let's Create a Sustainable Living Circle	2024/03/28	160
Characteristic Practice Workshop - "Meeting Your Future Self" - Pastel X Dried Flower Handmade Card Workshop (Baoshan Campus)	2024/09/27	15
Characteristic Practice Workshop - "Meeting Your Future Self" - Pastel X Dried Flower Handmade Card Workshop (Jinde Campus)	2024/09/27	15
Characteristic Practice Workshop - "A Corner of the Desk: Healing Painting Garden" Workshop (Jinde Campus)	2024/10/08	10
Protecting Consumer Rights, Moving Towards Sustainable and Responsible Production and Consumption	2024/10/16	150
Characteristic Practice Workshop - "A Corner of the Desk: Healing Painting Garden" Workshop (Baoshan Campus)	2024/11/01	10
Green Action Changhua Normal - Campus Green Life Walking Tour	2024/11/12	15
[I'm a Tour Guide "National Museum of Natural Science One-Day Experience"] Student Club Development and Service Learning Workshop	2024/11/24	20
Club SDGs Activity Achievement Sharing	2024/12/12	90
Unforgettable Cultural Memory - Stories of Indigenous Wild Vegetables	2024/12/13	40
Other Units	Date	Number of Participants
Literature, Food, Culture and Local Connections - USR Implementation Experience Sharing	2024/03/28	150
Crisis of Taiwan's Satoyama Environment	2024/03/26	140

Table 2: List of Diverse Learning Courses Organized by NCUE Units

Course Content	Date	Number of Participants
2024 fall semester-Green Energy Technology	2024/12/09-2025/01/08	200
Ecological and Macro Photography Aesthetic	2024/11/14	5
Appreciation and Practice	2024/11/14	3



Figure 1: The Poster of Ecological and Macro Photography Aesthetic Appreciation and Practice



Figure 2: The Poster of The Beauty and Value of Taiwanese Crafts



Figure 3: Mental Health Workshops



Figure 4: Suicide Prevention Education



Figure 5: Inner Child Exploration activities.

2. University Social Responsibility Implementation Project - Beautiful and Treasured Clams in Fangyuan and Dacheng: Sustainable Industry and Environment Project of Changhua's Two Cities Amid Climate Change

This project focuses on implementing the Sustainable Development Goals of the UN, addressing challenges faced by clam and corbicula aquaculture in Fangyuan and Dacheng townships of Changhua, Taiwan, and proposing comprehensive solutions. By offering interdisciplinary courses on practical environmental applications, we invite industry mentors and students to learn together. Through workshops focused on areas such as water quality monitoring and disease testing, the program promotes the application of probiotics and supply chain traceability management, while also fostering the integration of green energy and waste recycling. Furthermore, the initiative aims to develop smart aquaculture technology, thereby promoting the combination of eco-friendly practices and smart farming.

Concurrently, in order to achieve the vision of SDG 13, NCUE specifically offers a Climate Change Environmental Education Certification Course to cultivate specialized talent in sustainable aquaculture. Furthermore, to achieve SDG 11, the University established the Chang-Pin Water Paradise Industry-Academia-Government Alliance. This alliance assists young entrepreneurs with business startup and the promotion of local distinctive brands, thereby strengthening community development and sustainable business operations. These measures not only support local fishermen's livelihoods and industrial development but also achieve common goals of environmental friendliness and community sustainable development. In 2024, 34 sessions of 24-hour and 100-hour environmental educator training were conducted, along with 2 teacher environmental educator training sessions, 13 workshops related to local aquaculture industry cooperation, and 10 food and agricultural education workshops with local community development associations. Expert preparation meetings and workshops (9 sessions) were held for the industrial sustainable management care team. Activity highlights are shown in Figures 6-7.

Beautiful and Treasured Clams in Fangyuan and Dacheng Facebook page: https://www.facebook.com/NCUEUSR

SDG Relevance: 1. No Poverty, 8. Decent Work and Economic Growth, 11. Sustainable Cities and Communities, 14. Life Below Water



Figure 6: The local survey activities of Fangyuan Citizen Investigator



Figure 7: The marine education resource exploration course

3. USR - NCUE x Common Good Education - Enhancing 12-Year Basic Education in Rural Communities: This project aims to practice university social responsibility, enhance professional teaching competencies of student teachers, and implement practical teaching abilities. Focusing on strengthening regional resource integration and improving quality education in rural areas, schools from Taichung, Changhua, Nantou, and Yunlin counties were recruited to form the "Baisha Education Alliance." The project provides educational resources to schools and serves disadvantaged rural students, offering better learning opportunities and educational resources. During July-August 2024, NCUE collaborated with 6 rural junior high schools, high schools, and elementary schools from 3 counties to organize summer camps with 88 pre-service teachers as volunteers serving 257 junior high students. The summer camps integrated local school-based curricula and interdisciplinary characteristic courses. In addition to 12 teacher training courses including "Secondary Education Practice and Service Learning," "Interdisciplinary Teaching Application and Practice," and "Career Planning," 10 capacity-building workshops were held with 498 participants covering topics such as "Competency-oriented Teaching," "UCAN Career Cluster Introduction," "Drone Teaching," "Transition Counseling and Services," "Interdisciplinary Curriculum Design," and "Career Planning." Additionally, 12 collaborative school branch discussion sessions were held with 163 participants, producing interdisciplinary or cross-subject collaborative teaching plans. Student-centered approaches were used for exploring students' strength and planning their career to clarify graduating students' goals and directions. Through career interest exploration and individualized counseling using career exploration assessment tools, Personal Future Plans (PFP) were completed for individual students. From 2023-2024, a total of 51 disadvantaged rural students from 4 schools were served.

Project website of NCUE x Common Good Education: https://reurl.cc/VW4a2n SDG Relevance: 1. No Poverty, 4. Quality Education, 10. Reduced Inequalities



Figure 8: NCUE x Collaborative Education at Tianzhong High School



Figure 9: Career exploration courses at Wanxing Junior High School

- 4. NCUE Bilingual Education Research Center and Language Center Promoting Student Internationalization and Advancing National Bilingual Policy
 - (1) To provide professional development in bilingual teaching for pre-service teachers and in-service teachers, NCUE Bilingual Education Research Center organized multiple bilingual teaching-related lectures and workshops this year, such as the "Bilingual Teaching Competency and Teaching Practice Symposium" on October 26, 2024, inviting bilingual teachers to share teaching experiences and AI software applications for assisting bilingual teaching, training preservice teachers and teachers to utilize technology to enhance curriculum design skills. Regular bilingual teaching observation visits and experimental teaching demonstrations were also held to familiarize pre-service teachers with actual teaching situations and help them understand current requirements of academic preparation, building bilingual teaching competencies for future bilingual teachers. NCUE will continue collaborating with the Ministry of Education to enhance teachers' English proficiency for the 2030 bilingual policy implementation.
 - (2) To support the College of Management's English proficiency graduation requirements and guidance/incentive measures, the Language Center designed "Online Self-directed Learning Courses" and "Final Assessment" systems to help undergraduate students steadily improve English proficiency. In 2024, 40 students were guided to meet graduation requirements. The Language Center also continues offering diverse foreign language promotion courses including beginner courses in English, Japanese, Korean, German, Spanish, Indonesian, and Vietnamese for campus students, faculty/staff, and external community members, effectively expanding language learning influence and promoting campus internationalization.

SDG Relevance: 4. Quality Education, 17. Partnerships for the Goals, 8. Decent Work and Economic Growth



Figure 10: Bilingual experimental teaching experience sharing sessions.-1



Figure 11: Bilingual experimental teaching experience sharing sessions.-2



Figure 12: Bilingual experimental teaching experience sharing sessions.-3



Figure 13: Bilingual experimental teaching experience sharing sessions.-4

5. NCUE Student Psychological Counseling and Guidance Center

Through lectures, workshops, and film appreciation activities, students are guided in career exploration and understanding of good health and well-being (SDG3) and gender equality (SDG5) issues, encouraging reflection on interpersonal interactions and establishing a friendly campus environment. Related courses and guidance activities include:

- (1) Freshman Class Guidance: 2023 academic year freshman class guidance focused on interpersonal interaction and conflict resolution, combined with psychological testing and immediate interpretation to provide timely responses and answers for first-year students understanding interpersonal conflicts. Each session lasted 1-2 hours over 2 weeks. A total of 29 freshman class guidance sessions were completed, which served 753 students, with satisfaction ratings of 4.31 for psychological test interpretation and 4.27 for class guidance lectures.
- (2) International Student System Cooperation: 2023 academic year planning for international students (including overseas Chinese, mainland Chinese, and international students) featured "Interpersonal Relations" themed series activities to help international students develop healthy interpersonal relationships and effectively adapt to campus life.

Table 3: NCUE International Student Psychological Counseling Activities

Activity Name	Instructor	Participants	Satisfaction
2023 International Student Orientation Guidance Activity - International Student Friendship	Counseling Psychologist	56	4.32
"When We Play Together" Board Game Experience	Counseling Psychologist Li Yuting	12	4.47
Guardian - After Growing Up: Satir Influence Circles Seeing Family	Counseling Psychologist Wang Yichao	13	4.73
Guardian - Trauma-Informed Care: Trauma and Healing	Counseling Psychologist Xie Xiaorou	56	4.36



Figure 14: International student orientation series activities.1



Figure 15: International student orientation series activities.2



Figure 16: International student orientation series activities.3



Figure 17: International student orientation series activities.4

(3) Group Counseling Activities: A total of 9 group counseling sessions were held during the 2023 Academic Year, with a total participation of 366 individuals and an overall satisfaction rating of 4.72.

Table 4: Group Counseling Activity Sessions

C N	TD 4	G •	0 4 6 4
Group Name	Participations	Sections	Natistaction
Group maine	1 al ticipations	Sessions	Saustaction

Semi-mature Adult Adventure Plan - Self-exploration Group	23	6	4.88
"Truth or Dare" Intimate Relationship Exploration Growth Group	36	6	4.80
Air-fried Duck Pressure Cooker - Stress and Life Adjustment Group	53	8	4.90
Hey! Family/Shackle - Family Relationships and Self- growth Group	46	8	4.50
Cultivate Your Relationship Dream Field: Creative Dream Reading Group	44	8	4.67
Life Maze Advancement Plan - Career Exploration Group	18	6	4.75
Cherish Suffering Souls: Jungian Creative Dream Reading Group	48	8	4.75
See Trees and Forest - Interpersonal Relationship Growth Group	35	8	4.78
Navigation Compass - Career Self-exploration Group	63	8	4.45
Total/Average	366	64	4.72

(4) Gender Equality Education: Four speeches were held in the 2023 academic year, two each at Jinde and Baoshan campuses. The speeches introduced accessible approaches to help students understand gender diversity.

Table 5: NCUE Gender Equality Education Activities

Activity Name	Instructor	Participants	Satisfaction
Understanding the Sexual Multiverse of	Dr. Xu Zhiyun	43	4.51
Diverse Genders	Di. Au Ziliyuli	43	4.31
Waiting for a Cup of Hot Milk Tea -	Counseling		
Experiencing Unlimited Happiness from	Psychologist Chen	7	4.66
Limited Love	Yanren		
Micro-rebellious Girl's Military Career:	"Micro-rebellious	41	4.61
Military Culture and Gender Issues	Girl" Host Cony	41	4.01
From Clinic to Life: Gentle yet Firm Gender	Dr. Lin Jingyi	61	4.39
Movement	Di. Lili Jiligyi	01	4.39



Figure 18: Gender equality series activities

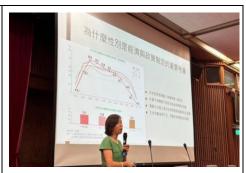


Figure 19: Gender equality series activities



Figure 20: Gender equality series activities



Figure 21: Gender equality series activities

(5) Emotional Management and Stress Adaptation Series Activities: Two workshops were held in the 2023 academic year to help participants recognize stress and emotional feelings and effectively relieve emotions and stress.

Table 6: NCUE Emotional Management and Stress Adaptation Activities

	<u> </u>		
Activity Name	Instructor	Participants	Satisfaction
"Fingertip Healing, Pastel Your Youth" Pastel	Social Worker Liao	13	4.55
Painting Workshop	Ruojie	13	4.33
"Encounter of Aroma and Herbs" Stress	Clinical Psychologist	16	2.04
Adaptation Workshop	Lai Mengmeng	16	3.84





Figures 22: Emotional			
management and stress adaptation			
activities-1			

Figures 23: Emotional management and stress adaptation activities-2

(6) Mental Health Promotion Project of MOE: During the second semester of 2023 and first semester of 2024, 10 services were provided including learning guidance mental health promotion, career lectures, life education workshops, class guidance theme salons, Zhixin Academy, suicide prevention gatekeeper training, special case treatment groups, and physician consultations. Students were guided in exploring various issues and establishing mental health resilience through curriculum teaching and activity participation to build correct values. A "comprehensive guidance model" was implemented for campus mental health promotion with integrated considerations, providing individual and group supervision of continuous education programs for relevant professionals to enable more immediate assistance for students.

Table 7: NCUE Ministry of Education Mental Health Promotion Project Activities

Activity Name	Participants	Average Satisfaction
Learning Guidance Mental Health Promotion	137	4.5
Career Lectures	113	4.53
Life Education Workshops	51	4.65
Class Guidance Theme Salons	100	4.55
Zhixin Academy	27	4.74
Suicide Prevention Gatekeeper Training	136	4.64
Special Case Treatment Groups	16	4.7
Physician Consultations	17	-
Individual Supervision	7	-
Group Supervision	24	4.8

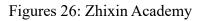


Figures 24: Learning guidance mental health promotion



Figures 25: Life education workshops







Figures 27: Special case treatment groups

SDG Relevance: 3. Good Health and Well-being, 4. Quality Education, 5. Gender Equality 5. Leading Students in Central Taiwan Social Welfare Organization Field Visits and Presentation

6. Leading Students in Central Taiwan Social Welfare Organization Field Visits and Presentation Sessions

NCUE guided students to independently visit six social welfare nonprofit organizations in central Taiwan, including: Hondao Senior Citizen's Welfare Foundation - Taichung Service Office (elderly social work), Taichung Zhu Fu Care Association Geng Shui Kids (disadvantaged family children and youth community work), Down Syndrome Association R.O.C. - Central Taiwan Office (adult intellectual disability social work), Tongxinyuan Community Rehabilitation Center (mental disability social work), Tsukuang Foundation (protective children and youth placement social work), and Shiny School (dropout youth and school social work). Through experienced professional workers from various units serving as mentors, students were guided to understand organizational characteristics and professional services in each field. Under the guidance of mentors, students will interact with service recipients from various fields. This process aims to give students a concrete understanding of how the professional goals, roles, service methods, and professional relationships of social work are applied in practical work.

Campus Headlines: https://www.ncue.edu.tw/p/406-1000-27202,r93.php?Lang=zh-tw



SDG Relevance: Good Health and Well-being, Quality Education, Reduced Inequalities

SDG 17.4.2 Education for SDGs: specific courses on sustainability

NCUE actively integrates sustainable development concepts through its curriculum to ensure that all faculty and students understand the 17 important goals of the United Nations Sustainable Development Goals (SDGs). Furthermore, as the second-largest teacher training university in Taiwan, NCUE has cultivated hundreds of secondary school teachers every year. Through providing sustainable development literacy curriculum knowledge, the university aims to nurture forward-thinking educators who can transmit correct concepts to the next generation of national leaders in their future teaching endeavors. This demonstrates NCUE's tremendous influence on the overall Taiwanese society through its promotion of sustainability education.

NCUE faculty members incorporate SDGs into course planning and mark this in the course registration system. Various types of courses such as human rights education, career education, indigenous education, gender equality education, environmental education, energy education, multicultural education, marine education, legal education, international education, etc., are all closely related to the United Nations Sustainable Development Goals. 17 SDGs are categorized into seven major groups, and the correlation between NCUE's courses and SDGs in Academic Year 2023 is shown in the following table. Since some courses simultaneously involve different category concepts, statistics show that a total of 2,091 courses incorporate relevant goal concepts. If each individual course is counted only once, NCUE offered 806 courses containing at least one UN Sustainable Development Goal-related element in that academic year, totaling 1,947 credits, with a combined enrollment of 23,951 student registrations. Details are provided in Table 1 below and Attachment 17.4.2A.

Table 1: Statistics of SDGs-Related Courses Offered by NCUE in Academic Year 2023

UN Sustainable Development Goals	Number of Courses	Credits	Student Enrollments
1. Equality: SDG 1,10,16 - Eliminating inequality and establishing a fair and inclusive legal society	290	713	8,596
2. Environment: SDG 2,6,7,9,11-15 - Agriculture, energy, economy, marine and terrestrial ecological conservation and sustainable development	359	908	10,363
3. Health: SDG 3 - Ensuring health and promoting wellbeing at all ages	238	559	7,780
4. Education: SDG 4 - High-quality education and promoting lifelong learning	513	1216	15,588
5. Gender: SDG 5 - Achieving gender equality and empowering women	276	655	8,724

UN Sustainable Development Goals	Number of Courses	Credits	Student Enrollments
6. Economy: SDG 8 - Promoting inclusive and sustainable economic growth, achieving full and productive employment	246	637	7,035
7. Global: SDG 17 - Global partnerships for sustainable development	169	417	5,249
Total (without removing duplicates)	2,091	5,105	63,335
Total (each course counted only once, no double counting)	806	1,947	23,951

Attachment: 17.4.2A - Statistics of Courses Related to SDGs Issues Offered in Academic Year 2023

SDG 17.4.3 Education for SDGs in the wider community

NCUE actively achieves various SDGs sustainable development policy objectives by organizing relevant educational activities for external audiences. This report selectively compiles and presents 10 examples of related initiatives implemented in 2024, detailed as follows:

- 1. NCUE's Sustainable Development Practice Lifelong Learning: The College of Extension Education organizes annual educational activities and courses to meet the extension education and learning needs of faculty and staff at NCUE, community residents, and the general public. The lifelong learning courses offered in 2024 are described below:
 - (1) Language Learning Programs: Multiple language learning courses were offered, including English, Japanese, Korean, French, German, Spanish, Thai, Vietnamese, and Indonesian, enabling community residents to develop second language competency according to their learning interests. In 2024, 39 classes were conducted with a total of 1,398 teaching hours, with 482 participants completing the programs and acquiring second language abilities.
 - (2) Community Senior University: To provide continuing education opportunities for older community members, NCUE has operated Changhua County Senior University since 1995, encouraging residents aged 55 and above to return to campus for learning. In 2024, two semesters were conducted, each lasting 16 weeks, with a total of 28 classes offered. The diverse curriculum included Japanese, English, calligraphy, traditional Chinese painting, arts, and smartphone application classes, with 882 participants completing the programs.
 - (3) Professional Development for Secondary School Teachers: Annual programs are conducted in coordination with the Ministry of Education and secondary school teacher development needs, offering in-service teacher second specialty and enhancement courses to improve teaching professional competency. In 2024, 70 courses were offered across different fields including Southern Min language, information technology, living technology, bilingual teaching, scouting education, and special education, providing 2,922 training hours with 1,384 participants.
 - (4) Leadership Training for Elementary and Secondary School Principals and Directors: As the only secondary teacher preparation institution in central Taiwan, NCUE has organized annual "Leadership Training Programs for Elementary and Secondary School Principals and Directors" since 2020 to fulfill university social responsibility. Each program continues for 4 months, and to date, 83 senior administrative leaders from elementary and secondary schools have been trained.
 - (5) Changhua County Business Talent Development: Located in Changhua County, NCUE collaborates with the Changhua County Government and private enterprises to assist local businesses in talent development for sustainable operations aligned with current trends. Since 2016, NCUE has annually conducted second-generation successor and female leadership training programs for small and medium enterprises, developing capabilities in management, innovative operations, digital marketing, communication, and negotiation. This training program has successfully graduated 379 participants to date. Additionally, to assist Changhua County

enterprises in addressing climate change issues and the European Commission's Carbon Border Adjustment Mechanism (CBAM) to be implemented from 2030, NCUE organized the "ESG Sustainability Planning Training Program" in 2024, conducting four sessions each of "ISO 14064-1 Organizational Greenhouse Gas Internal Verification Personnel Training Course and Certificate Program" and "ISO 14067 Carbon Footprint Management and Calculation Foundation Course and Certificate Program," delivered by professional instructors from SGS International Certification Company, training a total of 192 enterprise participants to develop deeper understanding of carbon emission calculation and verification.

- (6) Professional Enhancement Courses for Working Adults: NCUE plans vocational training courses based on community residents' needs and local industry requirements to enhance workplace professional competency. In 2024, 1,277 classes were conducted with a total training duration of 4,077 hours, assisting 2,451 participants in improving their knowledge and capabilities.
- (7) Community Extension Education Courses: Various extension education courses are offered from time to time, covering business operations, information technology, business management, marketing, and handicraft creation, enabling community residents to continue self-development according to their learning interests. In 2024, 60 classes were conducted with 1,369 course hours, attracting 1,213 participants.



Figure 1: Senior University -Calligraphy Class



Figure 2: Lifelong Learning Course
- Baby Yoga



Figure 3: Teacher In-Service
Training - Scout Education Second



Figure 4: Business Talent Training Course - ESG Sustainability (ISO

SDG Alignment: Good Health and Well-Being, Quality Education

2. The Community Psychological Counseling and Potential Development Center organized Early Childhood Play Therapy Practice Workshops to promote practical exchange in early childhood play therapy. The workshops invited psychologists, counselors from schools at all levels, social workers, child welfare professionals, and graduate students from related disciplines to explore methods of conducting play therapy with young children within the context of kindergarten culture, and how to collaborate with parents and teachers to formulate appropriate consultation goals and conduct efficient parent-teacher consultations through focused dialogue. The center also organized "Supervision" series workshops for trauma, artisan handicraft series lectures and workshops to enhance psychological resilience among relevant practitioners and improve community health and well-being.



Figure 5: Early Childhood Play Therapy Practice Workshop



Figure 6: Body-Oriented Experiential Dream Workshop

SDG Alignment: Good Health and Well-Being, Quality Education

3. The Language Center of the Office of International Affairs organized the "3rd Nantou County Mayor's Cup English Reading Assessment and Guided Writing Competition for Elementary and Secondary Schools" in collaboration with Tongde Senior High School in Nantou County, aiming to achieve the 2030 Bilingual Policy goal of "cultivating bilingual talent for Taiwan to engage with the world and comprehensively activating the bilingual transformation of the education system." The competition encompassed three levels, elementary, junior high, and senior high school, with two

components: "English Reading Assessment" and "Guided Writing," completed within 70 minutes. Through this collaboration, the Language Center once again demonstrated its expertise in English language assessment and test development experience, promoting the quality of English proficiency assessment in elementary and secondary schools while strengthening connections with local educational institutions and establishing a solid foundation for continued future cooperation.



Figure 7: English Reading Assessment and Guided Writing Competition Poster

SDG Alignment: Quality Education

4. Teacher Education Center's Advancement of Teacher Quality and Characteristic Development Program:

NCUE has organized the Baisha Summer School since 2011, where pre-service teacher form school administration and teaching teams, simulating diverse roles such as principals, academic affairs, student affairs, general affairs, and homeroom teachers to guide new elementary and junior high school students in adapting to campus life through creative and passionate transition courses. In summer 2024, 39 pre-service teachers were stationed at Xizhou Junior High School and Xinyi Elementary and Junior High School in Changhua County, leading 113 seventh-grade students to experience the joy of learning and welcome their new junior high school life.

Additionally, the Department of Fine Arts continued its collaborative partnership with the gifted program students and teachers of Nanguo Elementary School in Changhua County. From March to May 2024, 30 fine arts pre-service teachers were led to the Nanguo County Magistrate's Residence for in-depth community exploration and educational exchange. Starting from the historical and cultural significance of the Nanguo County Magistrate's Residence, the program guided and inspired pre-service teachers to integrate local characteristic elements, expanding visual arts and multi-sensory experiences. Pre-service students learned how to utilize architectural elements flexibly, breaking limitations of space and teaching, enabling art and education to deeply integrate

into community contexts and realize the spirit of localized and life-oriented education. The program explored the fusion of Japanese cultural characteristics of the Nanguo County Magistrate's Residence with Taiwan's local culture, understanding the core values of multicultural arts education with attitudes of respect and tolerance to appreciate artistic expressions from different cultures. Through arts education, the program promoted local revitalization and cultural heritage, creating sustainable and humanistic learning environments, realizing deep connections and collaborative future creation between schools and communities.



Figure 8: Baisha Summer School -Xinyi Elementary and Junior High School Curriculum Fair



Figure 9: NCUE Fine Arts
Department Teacher Candidates
Teaching Nanguo Elementary
Students to Paint Stained Glass
Windows



Figure 10: Opening Ceremony of Baisha Summer School at Xizhou Junior High School



Figure 11: Group Photo of Nanguo Elementary School Faculty and NCUE Faculty and Students

SDG Alignment: Quality Education, Sustainable Cities and Communities

5. The Science Education Center organizes mathematics and science teacher enhancement activities and student science and mathematics inquiry activities to improve literacy-oriented teaching competencies of high school, junior high, and elementary teachers and enhance students' interest and literacy in science and mathematics learning. Specific implementation methods include: science

education guidance for rural areas, on-site services for inquiry-based experimental courses for high school mathematics/science/bilingual experimental classes, assistance in establishing professional learning communities for teachers, organizing related mathematics and science teacher enhancement workshops, implementation and promotion of science inquiry lesson plans, teaching activity design demonstration competitions, and organizing national secondary school mathematical modeling competitions to enhance literacy-oriented teaching competencies of in-service and preservice teachers at all levels and improve student interest and literacy in science and mathematics learning. Science popularization activities are also organized, widely inviting rural schools and community residents from central Taiwan to participate, and to bring society and students closer to science.





Figure 12: Laboratory Visit

Figure 13: Science Open Day

SDGs Alignment: Quality Education, Reduced Inequalities, Sustainable Cities and Communities

6. The coastal areas of Changhua face severe climate change challenges, including extreme high temperatures, sudden heavy rainfall, water pollution, and bacterial proliferation, leading to massive shellfish deaths and aquaculture industrial crises. Changhua County was voted the most boring county online and urgently needs to develop digital tours combining mobile media materials. Coastal townships are aging toward super-aged communities, with aquaculture workers facing aging pressures, and the average bedridden period for elderly people in Taiwan is as high as 7 years, lacking local professional sports care teams to achieve active aging goals. The coastal areas of Changhua lack local environmental education seed teachers and carbon auditing professionals equipped to address climate change. Furthermore, the few young entrepreneurs who are willing to return to the area lack adequate guidance and a service platform, which prevents them from linking up and growing together. The USR program of NCUE aims to promote "Resilient Changhua Coast" environmental sustainability and social resilience development of Changhua County's coastal corridor settlements, offering innovative diverse courses, cultivating local characteristic talent, empowering young entrepreneurs through co-learning to achieve sustainable local industry operations. Link: https://www.facebook.com/NCUEUSR

SDGs Alignment: Sustainable Cities and Communities, Climate Action, Life Below Water

7. The Department of Physics has organized the Ministry of Education's High School Physics Gifted Student Cultivation Program since 2014, annually recruiting 59 first and second-year high school students. The teaching content balances theory and practice, with curriculum design focusing on cultivating students' physics concept construction, logical reasoning, and inquiry abilities, incorporating teaching aid design and experimental operation to strengthen students' hands-on and problem-solving capabilities. In addition to regular courses, field study activities are organized, including visits to science parks and science museums in northern, central, and southern Taiwan, arranging university general physics laboratory visits and experiments to help students deepen their interest in physics and expand their horizons while connecting academic knowledge with applications. Overall, the program implementation progress is pretty well with high student participation, helping to strengthen high school students' commitment to natural science fields and establish future academic and research directions.



Figure 14: Teacher Instruction



Figure 15: The Group Photo of High School Physics Science Talent Cultivation Program

SDGs Alignment: Quality Education, Reduced Inequalities

8. The Special Education Center undertakes commissioned and subsidized projects from the Ministry of Education. Internally, it provides support services for NCUE students with disabilities in learning assistance, life support, school adaptation, and transition services. Externally, it provides special education consultation services, conducts special education competency workshops, college special education on-site visits, college special education assessment, and publishes special education publications for guidance district schools and community residents.

For on-campus students with disabilities guidance, in 2024, the Special Education Center provided support services to 72 students with disabilities, academic learning assistance to 2,029 students, life support services to 258 students, career and transition services to 130 students, and counseling services to 280 students.

For community residents, students, teachers at all educational levels, and related guidance personnel, the center provides consultation hotline services to resolve issues in teaching practices, parental

guidance, and student counseling, and conducts special education on-site visits for guidance districts to understand schools' implementation of special education work. The center regularly publishes special education publications to assist professional development of special education teachers and related staff, and organizes transition coordination meetings for students with disabilities at colleges and universities to actively understand current situations, limitations, and resource needs of various schools in conducting transition guidance activities. In 2024, 86 special education consultation services were completed, 1 on-site visit guidance was conducted, 2 issues of Special Education Gardener journal were published, and 1 guidance district special education work review meeting and 1 transition coordination meetings for students with disabilities at colleges and universities were held.

Additionally, to enhance special education competencies of special education teachers, administrative staff, and related guidance personnel at all educational levels in the guidance district, the center annually investigates needs of first-line staff and combines special education policies of with future special education development directions to plan mandatory courses, elective courses, advanced courses, and thematic case study professional competency activities for special education guidance personnel. In 2024, 6 basic special education competency workshops, 6 advanced competency workshops, 1 advanced course, and 14 related special education courses were conducted, totaling 27 special education professional competency activities.

To address the continued increase in students with emotional and behavioral disorders and autism in colleges and universities, and responding to the characteristics of Changhua, Yunlin, and Nantou regions where resource distribution is uneven and special education resources are weak, the center develops support systems for students with emotional and behavioral disorders and autism to assist guidance personnel in the jurisdiction through four service aspects: (a) forming support networks through professional learning exchange communities, (b) integrating and connecting internal school resource networks, (c) providing on-site guidance for difficult cases, and (d) providing immediate consultation services. The center invites experienced guidance personnel from the guidance district, psychiatrists from medical institutions, and professors specializing in special education to serve as consultation committee teams, to provide strong support and assistance for guidance personnel, offering different services according to needs of individual cases. In 2024, the Special Education Center held 3 special education competency workshops, 9 professional exchange community activities, 2 emotional and behavioral disorders and autism special education advocacy events, and 1 difficult case on-site guidance.



Figure 16: Mind, Body, and Spirit Relief Solutions - Aromatherapy Workshop



Figure 17: Career and Life
Development - Friendly Institution
and Enterprise Visit Activity



Figure 18: Interpersonal
Relationship Building and Social
Skills Training - L.O.V.E Listening
and Communication Studies



Figure 19: Emotional and Behavioral Disorders and Autism Advocacy Activity

SDG Alignment: Good Health and Well-Being, Quality Education, Reduced Inequalities, Sustainable Cities and Communities

9. The College of Science and the Science Education Center jointly organized the 2024 Science Fun Day, collaborating with the National Science Education Program to invite participating schools. This event attracted over 10 schools registering and more than 450 participants and it was also open for on-site registration by community residents. Hands-on science booths were set up with "Science Magic Zone," "Science Adventure Zone," and "Science Exploration Zone" featuring practical, interesting science challenge activities. Although the activities spanned multiple scientific fields, they were presented in accessible ways, allowing elementary, junior high, and senior high school students to experience the wonders of science, providing reference for students interested in science in their academic career planning. The event aimed to bring the public closer to science, demonstrating that scientific knowledge exists not only in textbooks but can be learned in daily life. The 2024 Science Fun Day created a more comprehensive and quality educational environment for children in rural areas of Changhua County, and achieve the educational goal of "nurturing every child." Campus Headlines: https://www.ncue.edu.tw/p/406-1000-28558,r93.php?Lang=zh-tw



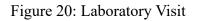




Figure 21: Xianxi Junior High School Faculty and Students

SDG Alignment: Good Health and Well-Being, Quality Education, Reduced Inequalities 10. 2024 Yanwang Cup National Science HomeRun Hands-On Competition

This competition featured a total prize pool of NT\$700,000 with a grand prize of NT\$100,000, attracting nearly 800 secondary school teachers and students from 18 counties and cities nationwide. Participating works used simple control boards for project research, with studies required to include at least two scientific concepts, combining electronic technology with engineering structures. The competition encouraged students to engage in active inquiry, leverage curiosity and imagination to identify problems, gain insights from data analysis through repeated verification, and finally demonstrate results through clear and accessible explanations or operations. By organizing such science competitions and activities, students' ability to integrate technological tools, materials, and resources, and their spirit of inquiry were enhanced. This competition developed students with scientific knowledge, hands-on practical skills, and learning habits, integrating these comprehensively into daily life.

Campus Headlines: https://www.ncue.edu.tw/p/406-1000-25946,r93.php?Lang=zh-tw



Figure 22: Evaluation Scene



Figure 23: Grand Prize and Gold Medal Winners' Victory Speech Group Photo

SDG Alignment: Good Health and Well-Being, Quality Education, Reduced Inequalities

SDG 17.4.4 Sustainability Literacy

Using 246 courses offered by the University during the Spring 2024 and 2024 Academic Years that are related to various SDGs as case studies (Attachment 17.4.4A), NCUE analyzed their relevance to SDG literacy, assessment methods, and learning outcomes. This evaluation is used to assess students' ability to learn and grasp key sustainability concepts, as detailed below:

1. Basic Course Information: A total of 246 courses with 7,544 student enrollments; the correlation between course content and SDG literacy components is shown in Table 1:

Table 1: Course Correlation with SDG Literacy Components

No.	SDG Literacy Components	Number of Courses	Percentage
1	No Poverty	54	22%
2	Zero Hunger	39	16%
3	Good Health and Well-being	135	55%
4	Quality Education	180	73%
5	Gender Equality	141	57%
6	Clean Water and Sanitation	61	25%
7	Affordable and Clean Energy	77	31%
8	Decent Work and Economic Growth	147	60%
9	Industry, Innovation and Infrastructure	101	41%
10	Reduced Inequalities	142	58%
11	Sustainable Cities and Communities	128	52%
12	Responsible Consumption and Production	115	47%
13	Climate Action	101	41%
14	Life Below Water	65	26%
15	Life on Land	66	27%
16	Peace, Justice and Strong Institutions	130	53%
17	Partnerships for the Goals	118	48%
	Average SDG literacy components per course:	7.32	

2. Diverse Assessment Methods: Within a single course, NCUE faculty can implement multiple assessment methods throughout the semester to comprehensively evaluate students' acquired

literacy competencies in that course. All 246 selected courses employ 2-4 assessment methods to comprehensively evaluate learning outcomes. The utilization rate of various assessment methods is shown in Table 2.

Table 2: Assessment Method Utilization

Assessment Method	Utilization Rate
Pre-class Assessment	4%
Pop Quizzes	9%
Midterm Examination	43%
Final Examination	44%
Class Participation	79%
Written Reports	42%
In-class Practical Exercises	28%
Project Presentations	33%
Student Performance Profile Reports	7%
Case Analysis Report Writing	8%

3. Learning Outcomes (See Tables 3 and 4)

- (1) Overall Faculty Assessment Results: Based on students' end-of-semester grades, over 94% of students in these courses achieved scores above 80 points, with an overall average score of 88.25 points (out of 100 points).
- (2) Student Self-Assessment Results: NCUE students conducted self-assessments through teaching feedback questionnaires. Statistical analysis shows that students' self-assessment scores for "This course contributes to the enhancement of knowledge or professional skills" and "Overall, I have benefited greatly from taking this course" were 4.6 and 4.7 points respectively (out of 5 points), indicating that students recognize having acquired relevant literacy competencies through the courses.

Table 3: Distribution of Faculty Assessment Grade Ranges

Overall Average Score	Number of Courses	Percentage
0~70	1.00	0.4%
71~80	15.00	6%
81~90	122.00	50%
91~100	108.00	44%

Table 4: Overall Learning Outcomes

Course Assessment Results			
Number of Courses	246		
Student Enrollments	7,544		
Faculty Assessment Overall Student Average Score	88.25		
Student Self-Assessment Average Score (This course contributes to my knowledge or professional enhancement)	4.6		
Student Self-Assessment Average Score (Overall, I have benefited greatly from taking this course)	4.7		