

SDG



SDG 1.2.1 Low income students receiving financial aid

Number of students

Number of NCUE students in the daytime programs at NCUE in 2023 (Figure 1): 5,044 in bachelor's programs, 1,721 in master's programs, 475 in doctoral programs, with a total of 7,240 full-time equivalent (FTE) students.

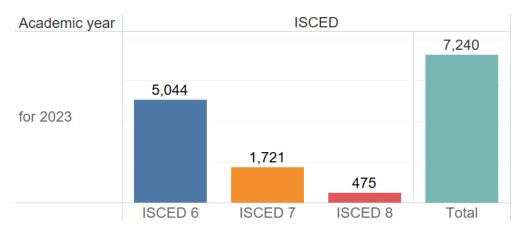


Figure 1. Number of FTE students in 2023

Number of low income students receiving financial aid

In 2023 (2022/2023 academic year), NCUE provided financial aid such as tuition and miscellaneous fee subsidies, scholarships, and work study student subsidies (Table 1- Table 3) to low-income students. A total of 1,049 low-income students (14% of all students) received financial aid (Figure 1). The total amount of subsidies and scholarships was NTD\$30,347,353.

The details of economic assistance measures are as follows:

- 1. Tuition and Miscellaneous Fee Subsidies: (Please refer to Annex 1.2.1A and Annex 1.2.1B)

 For students from low-income households, their entire tuition and miscellaneous fees are waived.

 For students from middle-to-low-income households, there is a 60% reduction in tuition and miscellaneous fees.
- 2. Work-Study Student Subsidies: (Please refer to Annex 1.2.1A and 1.2.1C)

 Calculated based on the hourly wage standard of the Ministry of Labor's basic wage. Wages are paid to students on an hourly basis, with a maximum of 10 hours per week during the semester and a principle of not exceeding 40 hours of work-study per month.
- **3. Scholarships:** In order to encourage NCUE's The Soaring Eagles Students (economically and culturally disadvantaged students) to strive for academic excellence, the university has established various scholarship and financial aid programs. Eligible students can receive these awards upon completion of their learning support activity records. (Please refer to Annex 1.2.1D, 1.2.1E, 1.2.1F, 1.2.1G)

Table 1. Tuition and miscellaneous fee subsidies

Item	Number of students	Amount (NTD)
Economically disadvantaged; low-income	87	4,144,730
Economically disadvantaged; middle-to-low-income	88	2,451,140
Economically disadvantaged; students in financial hardships	27	767,538
Indigenous people	133	5,432,795
Students with disabilities	60	1,623,218
Children of people with disabilities	165	5,329,732
Other	14	504,718
Disadvantaged Level 1 (Less than NTD\$300,000)	92	1,731,250
Disadvantaged Level 2 (NTD\$300,000 to NTD\$400,000)	31	590,000
Disadvantaged Level 3 (NTD\$400,000 to NTD\$500,000)	21	370,000
Disadvantaged Level 4 (NTD\$500,000 to NTD\$600,000)	21	368,750
Disadvantaged Level 5 (NTD\$600,000 to NTD\$700,000)	17	225,000
Total	756	23,538,871

Table 2. Work-study student subsidies

Item	Number of students	Amount (NTD)
Indigenous people	9	410,267
Military survivors and civil servants	0	0
Students in hardship	5	210,832
Students with disabilities	6	926,296
Children of people with disabilities	7	301,302
Low-income	15	294,721
Middle-to-low-income	15	747,589
Disadvantaged Level 1	10	210 165
(Less than NTD\$300,000)	10	318,165
Disadvantaged Level 2	5	103,985
(300,000 to NTD\$400,000)	3	105,985

Item	Number of students	Amount (NTD)
Disadvantaged Level 3	2	54.500
(400,000 to NTD\$500,000)	2	54,500
Disadvantaged Level 4	2	12.062
(500,000 to NTD\$600,000)	2	13,862
Disadvantaged Level 5	0	
(600,000 to NTD\$700,000)	0	-
Disadvantaged Level 6	2	105 664
(700,000 to NTD\$900,000)	2	105,664
Total	78	3,487,182

Table 3. University scholarships

Scholarship name	Semester	Number of students	Amount (NTD)
Notice for the Application of the National Changhua University of Education Mr. Jin-pyng Wang	Second semester of 2022	25	500,000
Scholarship for The Soaring Eagles Students (Please refer to Annex 1.2.1D)	First semester of 2023	20	400,000
Notice for the Scholarship and Subsidies for Diligent and Economically Disadvantaged	Second semester of 2022	10	200,000
Students entrusted to the National Changhua University of Education (Please refer to Annex 1.2.1E)	First semester of 2023	10	200,000
Notice for the Fei-Ling Electrical Engineering Company Scholarship and Bursary for The Soaring Eagles	Second semester of 2022	25	500,000
Students Entrusted to National Changhua University of Education (Please refer to Annex 1.2.1F)	First semester of 2023	25	500,000
Notice for the Application of the National Changhua University of Education Mr. Jin-pyng Wang Emergency Aid and University	Second semester of 2022	52	435,000

Scholarship name	Semester	Number of students	Amount (NTD)
Meal Coupons for Economically Disadvantaged Students (Please refer to Annex 1.2.1G)	First semester of 2023	48	586,300
<u>Total</u>	-	215	3,321,300

SDG 1.3.1 Bottom financial quintile admission target

To eliminate all forms of poverty, ensure the rights and interests of the poor and disadvantaged groups to be educated, and implement social protection measures, NCUE takes the following measures to assist domestic low-income students or other students who meet stricter standards:

1. NCUE has implemented the Higher Education Sprout Project and the The Soaring Eagles Project (aid for economically disadvantaged students) to help disadvantaged students receive a university education.

Through the promotion of the Higher Education Sprout Project, NCUE has progressively increased diverse admission opportunities for high school students. This includes encouraging departments to actively allocate quotas to expand admission opportunities for disadvantaged students, waiving application fees, providing transportation and accommodation subsidies, and conducting outreach for high school and vocational school admissions. To further the goals of the Sprout Project, NCUE has continued to organize "Caring for Regional High Schools and Vocational Schools" micro-course activities (Figures 1-2).

As of the end of July 2023, there were 347 students from families in the lowest 20% income group (low-income: 92, middle-to-low-income: 31, and disadvantaged levels 1-6: 199) studying at NCUE, accounting for 4.4 % of all students.



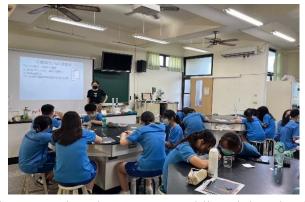


Figure 1. National Yuanlin Senior High School - Figure 2. Understanding the Benefits and Drawbacks of Experime Ultraviolet Rays on the Human Body through Reaction Experiments

Figure 2. Changhua County Erhlin High School - Experiment and Discussion on the Saponification Reaction

2. NCUE has introduced a variety of admission pathways for disadvantaged students and a better enrolling, learning, and counseling mechanism to increase social mobility.

NCUE is committed to providing opportunities for disadvantaged students (indigenous peoples, students with physical or mental disabilities, and economically disadvantaged students) to enroll. NCUE encourages its departments to allocate additional admission quotas through various channels and has devised a comprehensive set of educational, learning, and counseling mechanisms to enable students to unleash their full potential while studying at NCUE. The goal is to progressively increase the number of economically disadvantaged students enrolled each year. The details of the relevant admission measures are as follows:

- (1) Priority Admission (Please refer to Annex 1.3.1A): In the 2018/2019 academic year, NCUE introduced a "Priority Admission" mechanism in the university application process, which lowered admission criteria and increases the chances of admission for economically disadvantaged students. Applicable Departments for the 2023/2024 Academic Year: Department of Mathematics, Department of Physics (Physics Group), Department of Physics (Optoelectronics Group), Department of Biology, Department of English, Department of Electronic Engineering, and Department of Fine Arts.
- (2) The Soaring Eagles Admission Groups (Please refer to Annex 1.3.1A): In the 2019/2020 academic year, NCUE established the "The Soaring Eagles Admission Groups". Some departments allocate a certain number of admission quotas to each group, allowing for adjustments in the General Scholastic Ability Test standards and exempting some applicants who passed written document reviews from interviews. The goal is to enhance the opportunities for economically disadvantaged students to enroll in NCUE.
- (3) Additional admission quotas for indigenous peoples (Please refer to Annex 1.3.1A): Enrollment quotas are determined based on the principle of adding two percent to the admission quotas approved by the Ministry of Education for each college, institute, department, and degree program. The admission methods include written exams, interviews, written document reviews, skill tests, or implementations.
- (4) Separate Admission for Students with Physical or Mental Disabilities (Please refer to Annex 1.3.1B): Each department can separately allocate admission quotas up to ten percent of the department's annual approved admission quotas for students with disabilities. Admission methods may include written document reviews, interviews, skill tests, etc, at the discretion of each department. However, departments are encouraged to minimize the use of written exams.

In 2023, NCUE's departments provided 220 admission quotas for disadvantaged students (low-income households, middle-to-low-income households, students in hardship, indigenous people, and students with physical and mental disabilities). 98 students were admitted. The related admission results are presented in Table 1 and Figure 3.

Table 1. Overview of Admission Results in 2022 and 2023

Admission Name	2022	2023
University Application Admission –		
Priority Admission (Economically	0	2
disadvantaged students)		
University Application Admission – The		
Soaring Eagles Admissions Group	14	19
(Economically disadvantaged students)		
University Star Program Admissions –	1	2
Additional Quotas for Indigenous Students	1	3

University Application Admission – Additional Quotas for Indigenous Students	29	23
University Distribution Admission – Additional Quotas for Indigenous Students	2	3
Bachelor's Degree Program Separate Admission for Students with Physical and Mental Disabilities	8	7
Screening-based Admission (Score-Based Admission) for Students with Physical and Mental Disabilities	14	11
National Changhua University of Education College of Education Aboriginal Health Promotion and Care Management for the Elderly (Bachelor's Program)	-	30

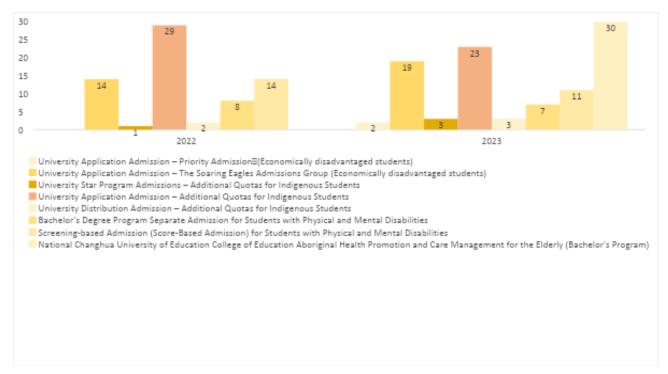


Figure 3. Overview of 2022-2023 Disadvantaged Student Admissions

SDG 1.3.2 Bottom financial quintile student success

In keeping with its development strategy for students from the families in Taiwan's lowest 20% income group in Taiwan, NCUE takes actions to eradicate poverty and ensure the social mobility of disadvantaged groups. For students from low-income households in Taiwan, NCUE has formulated projects, actions, and guidance mechanisms to assist students in achieving their graduation goals. The measures are as follows:

1. NCUE provides learning assistance and counselling measures. In 2023, 58 students from the lowest 20% income group received counselling, for a counselling rate of 48.74%. The total amount of rewards of NTD\$2,456,950.

Through the Higher Education Sprout Project, NCUE is dedicated to assisting students from families in the lowest 20% income group in establishing diverse learning objectives. NCUE also provides corresponding learning assistance and counseling measures, including initiatives such as the The Soaring Eagles Intensive Learning, promoting diligent learning, fostering excellent conduct, offering mutually beneficial guidance, facilitating research project learning, and providing generalized training. In 2023, a total of **119** students from families in the lowest 20% income group successfully graduated, constituting 78.29% of the disadvantaged graduating students. Among them, 58 received counseling through the The Soaring Eagles Project, with a counseling rate of 48.74%, and were awarded a total of over NTD\$2,456,950. The detailed comparisons of economically disadvantaged students who received counseling and graduated successfully in 2022 and 2023, along with the rewards, are as follows (Figure 1 and Figure 2):

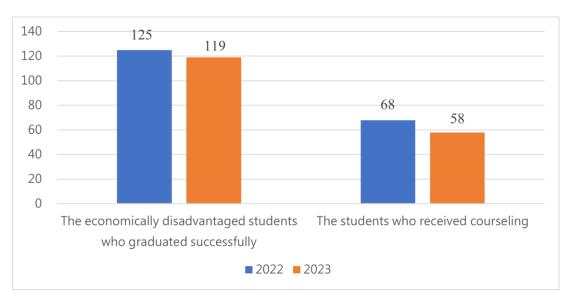


Figure 1. Comparison of economically disadvantaged students who received counseling and graduated successfully in 2022 and 2023



Figure 2. Comparison of rewards for economically disadvantaged students who received counseling and graduated successfully in 2022 and 2023

For relevant guidance and additional information about the award projects, please refer to photos in
Figure 3 and Figure 4. For more details and achievements, please visit the The Soaring Eagles
Project
website:

https://sites.google.com/gm.ncue.edu.tw/ncueeagle/%E8%BC%94%E5%B0%8E%E7%8D%8E%E5%8B%B5%E9%A0%85%E7%9B%AE?authuser=0

- (1) **The Soaring Eagles Learning Support:** A monthly reward of NTD\$6,000 is provided for goals including: Exploration and Implementation, Interdisciplinary Learning, Specialized Field Advancement, Enabling Off-Campus Internships, Community Engagement, Generalized Training, and National Indigenous Education. A monthly reward of NTD\$12,000 is provided for the Global Competence goal.
- (2) The Soaring Eagles Value Addition Package: Categories include: Professional Certification Attainment, Practical Project Productions, College Student Research Scholarship, Competition and Exhibition Design, and Diverse Developmental Learning. The rewards range from NTD\$5,000 to NTD\$10,000, based on the number of student applications, the achievements, learning performance, and project funding for the academic year.
- (3) Freshman Student Financial Assistance: A scholarship of NTD\$10,000 is awarded to freshmen who participate in empowerment activities, and attend meetings with their teachers to set learning goals. After completing and submitting the learning record form, the scholarship is granted after successfully passing the review process.
- (4) **Research Project Learning**: Students who participate in designated sessions of The Soaring Eagles Learning Enhancement Seminars and complete monthly learning logs are eligible for a reward. The reward is provided to up to 25 students per semester, with each student receiving NTD\$6,000 per month for 4 months.



Figure 3: Story Creation and Design - Online Marketing Store Interview



Figure 4: Industry-Academia Internship - Visit to Siliconware Precision Industries Co., Ltd. in Daya

SDG 1.3.3 Low-income student support

To support students from low-income households in finishing their studies, NCUE provides additional support to students to increase their income and respect their equal rights to education. The measures include the following:

1. NCUE integrates resources to provide support in areas such as finances, accommodations, food, education, and daily life.

In compliance with the Ministry of Education's Assistance Program for Disadvantaged University and College Students (please refer to Annex 1.3.3A), NCUE implements various financial aid initiatives, including tuition grants, living grants, emergency relief grants, and accommodation benefits to support disadvantaged students. Additionally, the Office of Student Affairs and the Center of Teaching Excellence, among other offices of NCUE, actively provide support measures for low-income and economically disadvantaged students to assist them in successfully completing their university studies. The comprehensive plan is as follows:

(1) Economic and Accommodation Support:

- (a) Tuition Grants: Financial aid is provided at five different levels, ranging from NTD\$5,000 to NTD\$35,000, to alleviate the financial burden of students.
- (b) Living Grants: Students receiving monthly living grants of NTD\$3,000 to NTD\$6,000 are required to engage in service-learning.
- (c) Emergency Relief Grants: Grants are provided based on the difficult situations faced by students.

(d) Accommodation Benefits:

- i. On-Campus Accommodation: <u>Free</u> on-campus accommodation is provided to students from low-income households, and priority is given to students from middle-to-low-income households for on-campus accommodation (including summer and winter breaks).
- ii. Off-Campus Accommodation: A subsidy ranging from NTD\$1,200 to NTD\$1,800 per month is provided for off-campus rental expenses based on the locations.

(2) Food, Education, and Daily Life Support:

- (a) Mr. Jin-pyng Wang Emergency Aid and University Meal Coupons for Economically Disadvantaged Students (please refer to Annex 1.3.3B): Intended for students in unfavorable living conditions due to the unfortunate demise of a student, significant family crises, severe injuries, or critical illness requiring medical treatment. The maximum aid amount is set at NTD\$50,000. The maximum aid amount may be adjusted for special cases. Students are eligible to apply for university meal coupons, with a maximum distribution of 40 coupons per application and up to 160 coupons per student per semester.
- (b) **The Soaring Eagles Mr. Jin-pyng Wang Scholarship** (please refer to Annex 1.3.3C): In the first semester, 20 students will be awarded, and in the second semester, 25 students will be awarded. Approved Soaring Eagles students must complete the learning guidance records before receiving a scholarship of NTD\$20,000 each.

- (c) Fei-Ling Electrical Engineering Company Scholarship and Bursary for The Soaring Eagles Students (please refer to Annex 1.3.3D): The principle is to award up to 25 students per semester, with each receiving NTD\$20,000. In the first semester of each academic year, 10 spots are reserved for freshmen.
- (d) **Scholarship for Diligent Students** (please refer to Annex 1.3.3E): Ten scholarships are awarded per semester, with at least one recipient from the Department of Industrial Education and Technology. Approved Soaring Eagles Students are required to complete learning guidance records before receiving a scholarship of NTD\$20,000.
- (e) **The Soaring Eagles Grants** (please refer to Annex 1.3.3F): The grants are awarded to undergraduate freshmen and continue until their fourth year of study. Each student receives an annual grant of NTD\$60,000, disbursed in two installments of NTD\$30,000 per semester. If a donor fails to make the contribution within three months or cannot be contacted, the grant disbursement will be suspended.

2.NCUE implements various units' assistance measures to help economically disadvantaged students move towards a better future.

NCUE's various offices provide other relevant assistance measures, including the following: project fund empowerment—Studying with Peace of Mind: Establishing Sustainable Special Funding for Education and Improving the Fundraising Management Mechanism; guidance and counselling—Provide Various Support on Daily Life; counselling—Provide Relevant Counselling Resources and Establish a Case Management Tracking System; learning support—Provide Various Learning Guidance Resources; and career planning—To help students understand the professional competencies related to their majors and their career interests, assist them in formulating personal future plans, and develop customized counseling and support programs to explore various potential career paths as early as possible. NCUE hopes that students from low-income families and economically disadvantaged students will realize their potential at NCUE to create a better future with them and fulfil its social responsibilities.

SDG 1.3.4 Bottom financial quintile student support

To help students from the families in the lowest 20% income group finish their studies and secure opportunities to pursue a brighter future, NCUE has formulated projects, actions, and guidance mechanisms to assist them in achieving their graduation goals.

Through the Higher Education Sprout Project, NCUE offers a comprehensive student guidance system, integrating and coordinating relevant resources to support students in successfully completing their studies. This support covers areas such as daily life, academics, career planning, and targeted guidance. The details of the various support initiatives are as follows:

- 1. Daily life guidance and counseling—NCUE's Higher Education Sprout Project uses target-based learning to help students improve their conduct and planning skills in the course of serving others to develop their work abilities for employment. The Project offers students various forms of living assistance, including campus meal coupons and emergency aid, to ease their economic burdens. NCUE provides counseling resources and follow-up tracking to students with physical or mental disabilities, severe emotional distress, or special needs.
- 2. Learning guidance to identify the best students and assisting the competent ones—The Project focuses on helping students formulate learning plans and pathways, manage their time effectively, and keep track of their learning progress to enhance autonomous learning, cross-disciplinary learning, and academic guidance. It includes initiatives such as foundational knowledge enhancement, generalist training, international competence development, and research projects, aimed at extending the depth and breadth of students' learning experiences.
- 3. Career counseling that facilitates employment—Assist students in formulating personal future plans and developing customized guidance and support programs to promote career exploration and competency preparation. This includes career orientation and one-on-one career counseling, enhancing students' abilities in career planning and direction.
- 4. Precise guidance, fostering students' resilience (Figure 1): In addition to continuing to provide students with résumé reviews, mock interviews and guidance, as well as career-related workshops, we adjusted the capacity of "career orientation" counseling in the second phase. This will expand from serving only disabled students with career orientation needs to encompass economically or culturally disadvantaged students on campus who also require career counseling and assessment. This will help a greater number of students in planning their future careers.



Figure 1. Targeted Counseling Concepts

In 2023, the Project's 12 guidance sub-projects helped 2,290 students, resulting in a disbursement of NTD\$12,189,000 in rewards. "Learning guidance" topped the list at 58.21%, followed by "psychological guidance" (25.37%), "daily life guidance" (14.93%), and "career guidance" (1.48%). NCUE also continued to improve the management mechanism of bursary projects, ensuring the students' economic safety during their studies and helping them study at ease until graduation. The relevant issuance details are as shown in the following Table 1, Figure 2, and Figure 3.

Table 1. Expenditures for economically and culturally disadvantaged student rewards in 2023

2023	Daily life guidance	Learning guidance	Psychologica l guidance	Career guidance	Total
Number of students served	342	1,333	581	34	2,290
Expenditures for	2 020 000	0.424.000	27/1	107.000	10 100 000
student rewards (NTD)	3,920,000	8,134,000	N/A	135,000	12,189,000

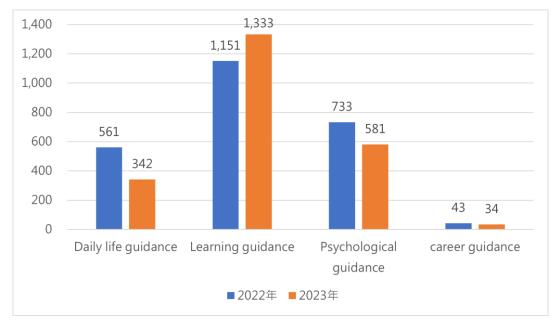


Figure 2. Comparison of Counseling Sessions for Economically Disadvantaged Students in 2022 and 2023

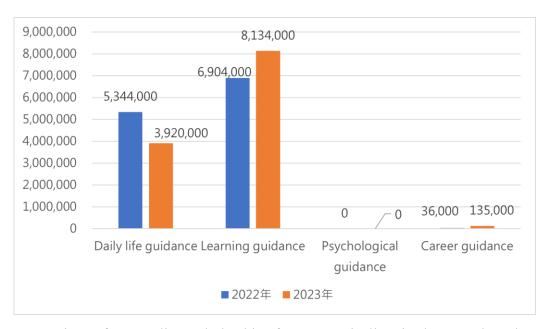


Figure 3. Comparison of Counseling Scholarships for Economically Disadvantaged Students in 2022 and 2023

SDG 1.3.5 Low or lower-middle income countries student support

One of the world's toughest challenges nowadays is eradicating poverty, and that challenge is an indispensable part of sustainable development. NCUE not only actively subsidizes domestic low-income students to ensure social mobility and increase their chances of a bright future, but also attaches great importance to the poverty-eradication measures for students from low- or lower-middle-income countries. The following NCUE projects help students from low- or lower-middle-income countries pursue their studies in Taiwan:

1.NCUE formulates relevant plans, scholarships, and bursaries.

NCUE has formulated and continues to implement scholarships and bursaries for economically disadvantaged students from lower- middle-income countries, (e.g., Indonesia, India, Vietnam, Pakistan, Thailand, Nepal, and Eswatini.) The financial aid includes the following:

- (1) Grants for Overseas Taiwanese Students: Providing support for overseas Taiwanese students from underprivileged backgrounds who are dedicated to their studies. (Please refer to Annex 1.3.5A)
- (2) Graduate School Scholarship for Outstanding Overseas Taiwanese Students: Encouraging outstanding overseas-Taiwanese students to return to NCUE for graduate studies. (Please refer to Annex 1.3.5B)
- (3) Foreign Students Scholarship: Attracting outstanding foreign students to enroll in degree programs at NCUE and encouraging foreign students on campus. (Please refer to Annex 1.3.5C)
- (4) Nurturing Excellence Doctoral Students Scholarship: Encouraging outstanding and research-capable doctoral students. (Please refer to Annex 1.3.5D)
- (5) Ministry of Education's TEEP (Taiwan Experience Education Program): Attracting more outstanding young individuals from advanced countries or emerging markets to come to Taiwan. (Please refer to Annex 1.3.5E)

2. NCUE continues to grants subsidies as it implements the plans.

In 2023, 172 students received financial aid, totaling NTD\$8,937,910 (Table 1). NCUE also pressed ahead with subsidies for students from developing countries. For relevant statistics, please refer to Annex1.3.5F.

Table 1. Schedule of subsidies for students in need from low-income or lower-middle-income countries

Support Projects	Number of grantees	Grant amount (NTD)	Country
Grants for Overseas	56	006.000	Indonesia
Taiwanese Students	56	996,000	Malaysia
Graduate School Scholarship			
for Outstanding Overseas	5	300,000	Malaysia
Taiwanese Students			
Foreign Students	52	3,036,910	India

Scholarship				Vietnam
				Indonesia
				Mongolia
				Turkey
				Iran
				Malaysia
				Pakistan
				Eswatini
Nurturing	Excellence			
Doctoral	Students	2	960,000	India
Scholarship				
				India
MoE's Toivyon	Evenoriones			Indonesia
	Experience			Vietnam
Education	Program	57	3,645,000	Thailand
(abbreviated as: T	EEP@AS1a			Nepal
Plus)				Malaysia
				Pakistan

SDG 1.4.1 Local start-up assistance

In order to promote the establishment of financially and socially sustainable enterprises within the community, NCUE has integrated government resources and provided educational support through relevant courses, workshops, and seminars to foster the development of startups. The university offers space and facilities, assembles interdisciplinary faculty teams, and leads students in proactively visiting local businesses to help diagnose issues and propose solutions. Furthermore, industry professionals with practical experience are appointed as co-instructors to help combine academic learning with industrial trends, ensuring that students are well-prepared to meet the demands of the job market. These initiatives collectively enhance the financial and social sustainability of local enterprises. Related policies and highlights are shown in Table 1.

Table 1: Measures and Programs Supporting the Sustainable Development of Local Enterprises in 2023

Plan/policy	Highlights	Photos
Language	The Language Center, aiming to foster	
Promotion Courses	international communication skills and fulfill	Prints
(Figure 1)	university social responsibilities, regularly offers	
	various language promotion courses. These	
	courses serve university faculty, staff, students,	
	foreigners, new immigrants, and members of the	
	public. The center also designs specialized courses	
	to meet specific language training needs of	Figure 1: French Language
	government agencies and businesses. In 2023, 41	Promotion Course by the Language
	language promotion courses were offered,	Center
	benefiting 624 participants.	
Evergreen	The College of Extension Education has been	
University for the	operating the Changhua County Senior University	
Local Community	since 1995 to provide continuing education	
(Figure 2)	opportunities for senior community members. This	
	program encourages county residents aged 55 and	The second secon
	above to return to campus for learning. In 2023,	
	two terms were offered, each lasting 16 weeks,	
	with a total of 27 classes. The courses covered	
	diverse subjects including Japanese, English,	Figure 2: Senior Citizens' University
	calligraphy, Chinese painting, art, and mobile	- Art Class
	phone applications. A total of 798 participants	
	completed the program.	

Plan/policy	Highlights	Photos
Women's Academy – Elite Leadership Training Program for Female Leaders (Figure 3)	On September 20, 2023, the School of Continuing Education held the "Women's Academy - Elite Training Program for Female Leaders." This program focused on sustainable business management and included courses on macroeconomics, financial planning, ChatGPT, and ESG. It attracted 40 female leaders from various industries, including metal, machinery, food, cosmetics manufacturing, apparel wholesale, and healthcare. The program aimed to enhance professional knowledge and strategic thinking skills, expand networks, and promote exchange, nurturing more female leaders in hanghua County to create a brighter future.	Figure 3: Women's Academy - Elite Training Course for Female Leaders
Training Program for Elementary and Secondary School Principals and Directors on Business Acumen (Figure 4)	As the only secondary school teacher training institution in central Taiwan, NCUE has been organizing an annual "School Management Literacy Training Program for Principals and Directors of Elementary and Secondary Schools" since 2020. Each course lasts four months. In 2023, 19 high-level administrative leaders from elementary and secondary schools were trained.	Figure 4: Graduation Ceremony for
		the Management Literacy Training Course for Elementary and Secondary School Principals and Directors
Community Extension Education Courses (Figure 5)	The College of Extension Education periodically offers various extension education courses, covering business operations, information technology, business management, marketing, and handicraft creation. These courses allow community members to continue self-growth based on their learning interests. In 2023, a total of 58 classes were offered, with a total of 1,783	

Plan/policy	Highlights	Photos
	course hours, attracting 1,378 participants.	Figure 5: Continuing Education
		Course - Moss Micro-landscape
		Ecological Bottle
Carbon Footprint Value-added Application Program (Figure 6)	In 2023, the university participated in the Ministry of Economic Affairs' Industrial Bureau's "Industrial Low-Carbon Guidance Project," forming a low-carbon transformation guidance team comprising 28 seed teachers from the Colleges of Engineering, Science, Technology, and Management. The team assisted teachers in obtaining "ISO14064-1 Carbon Inventory Lead	2050
	Verifier" certification to help small and medium- sized enterprises in low-carbon and intelligent transformation. The university also applied for the Industrial Bureau's "Carbon Inventory Value- Added Application Project," submitting 19 applications with 17 projects approved, achieving a 90% success rate and securing funding of NTD\$3.4 million.	Figure 6: "2050 Net-Zero Transition: A Win-Win through Labor-Management Collaboration" Press Conference
Xinxiang Swimming Academy (Figure 7)	To promote proper recreational activities, enhance students' physical fitness and mental health, and promote swimming as a lifelong sport, the university's Xinxiang Swimming Academy employs professional coaches and offers group classes for children, toddlers, and adults. The Academy also offers private coaching. Currently, in collaboration with the Sports Administration's elementary school swimming program, the academy has served over 10 elementary schools. The Academy also accommodates courses arranged by the university's Physical Education Office, Precision High School's swimming club, and Zhengde Elementary School's summer camp swimming activities.	Figure 7: Swimming Class at Zhongxiao Elementary School

Plan/policy	Highlights	Photos
U-First Professional Sports Coaching Service Team (Figure 8)	In 2020, the university established the "U-First Professional Sports Guidance Service Team" (a service-oriented club), forming a cross-departmental, interdisciplinary, and cross-team alliance involving the Department of Sports and Graduate Institute of Sports and Health, and community development associations. Through regular sports guidance and consultations, the team helps local community members develop regular exercise habits and improve physical fitness, strengthening ties with local residents. In 2023, 64 sports guidance and consultation services were provided, benefiting 2,880 people.	Figure 8: U-First Professional Sports Guidance Service Team Activity
Academia's Technology Caring Project for SMEs/Industrial Park-based Industrial Counseling Innovation Project in Support of SMEs /Small Business Innovation Research(Figure 9)	Care plans: 1. Participating enterprises: 11; experts and scholars: 9; students: 13 2. New products/technology development: 2 cases 3. Technical and talent training courses: 2 sessions 4. Applications for government subsidies: 3 applications for a total of NTD\$2,400,000 SBIR Program: Through the promotion of short-term technical guidance for businesses and practical training courses, NCUE is committed to enhancing business skills in line with current trend requirements, further achieving the goal of improving production efficiency, and strengthening industrial competitiveness. NCUE has assisted Hunter Design Consultants Company in applying for the Changhua County SBIR program, securing a government subsidy of NTD\$1,000,000. National Industry-Academia Innovation Practices Competition: To foster the innovative thinking and practical skills of university and college students, as well as	Figure 9: Entries for the 2023 National College Industry- Academia Innovation Practice Competition

Plan/policy	Highlights	Photos
	technological expertise in making innovative and	
	highly practical projects, NCUE partnered with	
	the Changhua Association of Industry-Academia	
	Advancement to co-host the National Industry-	
	Academia Innovation Practices Competition. In	
	2023, the competition attracted a total of 237	
	teams comprising faculty and students from	
	universities and colleges across the country, with	
	188 projects advancing to the final round.	
	Photos:	
	https://drive.google.com/drive/folders/1Fmqmh	
	wYVtqkP6FPEvuw2hs3nlZjuZE3X?usp=drive	
	link	
	News Coverage:	
	* Changhua County Government - 2023 Linker	
	Infinite ∞ Possibilities - Award Ceremony for the	
	National High School Essay Competition and	
	National College and University Creative	
	Marketing Competition.	
	https://www.chcg.gov.tw/ch2/newsdetail.aspx?bull	
	_id=392594&utm_source=website&utm_medium	
	=list&utm_campaign=news01	
	*ATA news -Linker Infinite ∞ Possibilities ~	
	National College and University Creative	
	Marketing and High School Essay Competition	
	Awards Ceremony Held Today.	
	https://www.atanews.net/?news=106773	
University Social	1. Held 53 training sessions (ranging from 24, 33,	
Responsibility	or 100 hours long) for environmental educators.	
(USR) Projects:	2. Conducted 2 sessions of environmental	80 000
'Deep Cultivation	education staff training with local teachers.	
in Fangyuan' and	3. Held 3 environmental education courses and	
'Joining Hands in	workshops on solar photovoltaics and green	
Dacheng:	energy.	
Changhua Twin	4. Held 20 workshops related to the aquaculture	
Cities' Industrial	industry and local cooperation.	

Plan/policy	Highlights	Photos
and Environmental	5. Actively nurtured local environmental educators	Figure 10: Marine Education
Sustainability'(Fig	and helped them implement food and	Resource Field Study Course
ure 10)	agriculture education and relevant marine	
	conservation initiatives.	
	6. Established a care team for sustainable	
	industrial development and held 13 expert	
	preparatory meetings and workshops.	
	7. Held 14food and agriculture education	
	workshops with local community development	
	associations.	
	Fan page:	
	Beautiful and Treasured Clams in Fangyuan and	
	Dacheng: Sustainable Industry and Environment	
	Project of Changhua's Two Cities Amid Climate	
	Change.	
	https://www.facebook.com/NCUEUSR	
	News Coverage:	
	Intergenerational Collaboration Illuminates the	
	Community! Changhua Marine Food Research	
	Base Discovers a New Model for "Human-	
	Economic Synergy" in Hometown	
	Development. <u>https://www.gvm.com.tw/article/104</u>	
	<u>329</u>	

SDG 1.4.2 Local start-up financial assistance

NCUE is proactively intensifying its partnerships with local industries, with a specific emphasis on bolstering interdisciplinary collaboration among neighboring educational institutions, especially strategic alliances with regional universities and industry stakeholders. These collaborative efforts provide NCUE with valuable insights into industry needs, facilitate the adaptation of the school's research focus, and offer practical hands-on experiences. Consequently, NCUE is well-equipped to strategize and implement cross-institutional, interdisciplinary, and startup-oriented collaborative projects. This approach substantially amplifies the capacity and impact of NCUE's industry-academia partnership initiatives. The relevant implementation strategies are as follows:

- 1. NCUE actively participated in various industry-academia collaboration projects (Table 1). In 2023, a total of 415 projects were executed by the faculty, with an amount exceeding NTD\$47,130,000. Compared to 2022, the number of executed projects increased by 9.1%. NCUE continuously put effort in assisting businesses in enhancing their competitiveness and fostering collaboration between the industrial and academic sectors.
- 2. NCUE fostered collaboration between NCUE's faculty and businesses to develop new products and technologies. Actively seek government research and development subsidies and resources.
- 3. NCUE provided technical training courses for businesses, and support students in internships and competitions to cultivate professionals in the fields of green energy and smart manufacturing.
- 4. Through regional cross-institutional alliance mechanisms, NCUE and other schools jointly promote specialized knowledge in smart manufacturing, green energy, and carbon reduction. In addition, the alliance offered entrepreneurship and business development courses to facilitate the commercialization of research and development outcomes.
- 5. NCUE organized intellectual property and innovation entrepreneurship cultivation events, and provided expertise in patent protection for smart manufacturing and research and development **products.** NCUE also promoted the research and development achievements of campus-derived enterprises.

6. Key Achievements:

NCUE collaborated with National Chung Hsing University, Hungkuang University, Tunghai University, National Chiayi University, National Yunlin University of Science and Technology, Taipei Medical University, National Taipei University of Technology, and National Chin-Yi University of Technology on the "Central Taiwan Cross-Institutional Integrated Research and Industrialization Platform Project," aiming to foster expertise in smart manufacturing and green energy reduction, offering entrepreneurial and business incubation programs to promote industrial innovation, and facilitate the commercialization of research and development outcomes.

(1) The project assisted 64 businesses by engaging 63 experts and scholars, along with 121 students, to support these businesses in their industry and technology upgrades from 2020 to 2023. This effort contributes to strengthening the operational and research and development capabilities of Taiwan's small and medium-sized manufacturing factories. It also enhanced the expandability of

- smart manufacturing technologies required by various industries.
- (2) NCUE provided assistance to its faculty in jointly developing new products and technologies with businesses. From 2020 to 2023, there were 19 cases of new product and technology development, resulting in two patent applications from two different businesses through industry-academia collaboration.
- (3) The project actively assisted faculty and businesses in applying for government subsidies (local or central). In 2023, a subsidy of NTD\$2,400,000 was secured.
- (4) NCUE conducted technical and talent training courses in response to the needs of businesses in industrial areas. In 2023, 2 large-scale technical and talent training sessions were organized.
- (5) NCUE offered substantial support and guidance to its faculty for establishing start-ups rooted in their patented research and development work in 2023. Professor Tsung-chi Lin from the Department of Biology received approval from the National Science and Technology Council for the 2022 Taiwan Germination Program (MOST Germination Program), with approved funding totaling NTD\$7,600,000.
- (6) The universities of the project organized a seminar focusing on intellectual property, innovation, entrepreneurship incubation, along with an exhibition showcasing the research and development achievements. This event served to provide faculty members from NCUE and other universities and colleges nationwide with a profound understanding of intellectual property, patent strategies, and patent protection for campus-derived enterprises. Additionally, it aimed for the promotion of research and development outcomes.

Table 1. Achievements of National Science and Technology Council Projects, Non-National Science and Technology Council Projects, and Industry-Academia Projects executed by NCUE's faculty members in 2023

Number of projects/ amount Project Category	Number of projects	Amount
National Science and Technology Council Projects(General Projects)	144	137,504,710
Non-National Science and Technology Council Projects	154	269,576,079
Industry-Academia Projects	117	64,247,346
Total	415	471,328,135

SDG 1.4.3 Programmes for services access

People are at the core of sustainable development. NCUE is duty-bound to create a fair, just, and inclusive future. It is vital for universities to promote sustainability and improve everyone's access to basic services. To eradicate poverty, NCUE organizes training and projects to improve students' and related interest groups' access to basic services.

To care for the community with high-quality education and reduce inequality, NCUE seeks to improve everyone's access to basic services by implementing various projects (e.g., National Science and Technology Council, Ministry of Education projects, University Social Responsibility (USR) Projects, University Social Responsibility (USR) Hub Projects), offering language courses, sending groups to serve remote areas, and holding open seminars and community education activities. The relevant plans, policies, and results on education, service, electricity, health are as follows:

Category	Responsible units	Plan/policy	Highlights	Photos
Education	Special	The Project of	Provided relevant	
	Education	Recruiting and	support services to	
	Center	Guiding Students	NCUE students with	
		with Physical	physical and mental	
		and Mental	disabilities; 1581	
		Disabilities by	people received help	
		Universities and	with learning, 147	
		Colleges 2023	people received	Figure 1: On-site Assistive
		(Please refer to	assistance with daily	Technology Assessment by Tamkang
		Annex 1.4.3A)	life, 169 people	University's Resource Center for the
		(Figure 1)	received help with the	Visually Impaired
			job transitions, and 189	
			received guidance and	
			counseling services	

Education	Special	The	Held 22 professional	Annih West
	Education	implementation	competency activities,	
	Center	plan of	including 6 mandatory	THE RESERVE THE PERSON NAMED IN
		Changhua-	introductory courses, 2	
		Nantou-Yunlin	mandatory advanced	
		Region's Special	courses, 11 elective	
		Education	advanced courses, and	SZ 11655
		Identification	3 specialized courses.	Figure 2: Special Education
		and Guidance		Professional Development Seminar -
		(Enhancing		Understanding and Needs Assessment
		Professional		of Students with Disabilities
		Competency)		
		2023 (Please		
		refer to Annex		
		1.4.3B) (Figure		
		2)		

Education	Special	Special	rved a total of 84	
Zaacanon	Education	Education	ople	ACE SABOR
	Center	Centre's	id 5 visits to	Harden Andrews Control of the Contro
		Counselling	hools to provide	100
		Project for	unselling services	
		Students with	blished two	
		Disabilities 2022	sues of the Special	
		(Please refer to	lucator's Journal Figure 3: Spec	ial Education
		Annex 1.4.3C)	benefit special Publications	
		(Figure 3)	ucation	
		(8 -)	partments, special	
			ucation resource	
			nters, special	
			ucation	
			ministrative	
			tities, faculties	
			d students at all	
			vels, and	
			mmunity	
			embers across	
			iwan.	
			onducted 2	
			iefing sessions on	
			e identification of	
			idents with	
			sabilities in	
			iversities and	
			lleges, with 1	
			ssion on special	
			ucation work	
			view in the	
			unseling districts,	
			d 1 liaison	
			eeting for	
			sabled	
			iversity/college	
			idents on their	
			insition to life in a	

				higher education	
				institution.	
Education	Center for	University	1.	Organized a one-	
	Teacher	Distinctive		week Baisha x	期 1 時 1 明 1 個 1
	Education	Project		Common Good	The state of the s
		Application for		camps in 6 rural	
		the Third Phase		secondary and	
		(2022-2023) -		primary schools in	
		University Social		3 counties and	
		Responsibility		cities, serving 260	Figure 4: Self-Awareness Course for
		Implementation		students	Students at Yi-Wu Junior High
		Project: Baisha x	2.	Using career	School in Yunlin County
		Common Good:		exploration	
		Deep Cultivation		assessment tools to	
		and		serve 56	
		Advancement of		disadvantaged	
		Local		students from 4	
		Communities		rural schools,	
		(Please refer to		helping them	
		<u>Annex 1.4.3D</u>)		complete individual	
		(Figure 4)		career-exploration	
				activities	

		1	T	
Education	College of	Public lectures	Provided courses on	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	Extension	and community	senior education (27	and the state of t
	Education	education	classes, 798	
		activities	participants),	
		(Please refer to	enhancement of	
		<u>Annex 1.4.3E</u>)	teachers' capabilities	
		(Figure 5)	(62 courses, 1,651	
			paticipants), training	Figure 5: Calligraphy Class at Senior
			for 19 primary and	Citizens' University
			secondary school	
			principals and directors	
			in management skills,	
			training for 39 second-	
			generation successors	
			and female leaders in	
			SMEs, workplace	
			skills enhancement	
			training for	
			professionals (87	
			classes, 1,712	
			participants), and	
			various continuing	
			education courses (58	
			classes, 1,378	
			participants).	

Service	Extracurricul	Service Clubs -	Student service
	ar Activities	Mountain	organizations held
	Team, Office	Service Club,	various learning
	of Student	Fishing Village	activities during the
	Affairs	Service Club,	academic year, such as
		Rural Service	event planning, drama
		Club (Figure 6)	skills training, team-
			building exercises, and
			outdoor games. During
			winter and summer
			breaks, they provided
			services in rural
			schools, offering
			recreational camps for
			local elementary
			students. Additionally,
			these clubs engaged in
			community services to
			connect with local
			initiatives. For
			example, the Mountain
			Service Club
			conducted street
			cleaning and mural
			painting, while the
			Rural Service Club
			hosted evening events,
			interacting with elders
			and children. Through
			these hands-on
			experiences, the
			participating students
			gained unique insights.
			After each activity,
			they engaged in
			discussions with their
	1	Ī	1.



Figure 6: Rural Service Team - Lowaltitude Rope Climbing Experience

instructors. In 2023, seven service events

	were held, with 138	
	volunteers serving a	
	total of 385	
	participants.	

Electricity	Department	University	1	Green Energy USR	
Dieetricity	of Electrical	Distinctive	1.	Micro-Course: A	
	Engineering	Project		total of 154 students	
	Lingmeering	Application for		enrolled in the	
		the Third Phase		Green Energy USR	
		(2022-2023) -		Micro-Course.	<u>li:</u>
		University Social		Green Energy	
		Responsibility		Education: 5	Figure 7: Training Program for Green
		Implementation		teacher training	Energy Education Seed Teachers
		Project :		workshops were	Energy Education Seed Teachers
		Sustainable		conducted with a	
		Changhua:		total of 94	
		Green Energy		participants. One	
		Perspective in		set of teaching	
		Education,		materials was	
		Technology, and		developed, and 38	
		Economy (Please		seed teachers were	
		refer to Annex		trained.	
		1.4.3F) (Figure	3.	Green Energy	
		7)		Technology:	
				Completed 5 project	
				productions.	
			4.	Green Economy:	
				Conducted three	
				energy and carbon	
				footprint training	
				courses, training 24	
				of our university's	
				faculty and students	
				to obtain the	
				ISO14064	
				greenhouse gas	
				inventory	
				certification.	
				Additionally, two	
				ISO50001 energy	
				management	
				certification training	

	courses were held.	
	NCUE successfully	
	assisted 13	
	companies in	
	Changhua County in	
	completing their	
	carbon inventories.	

	T	<u></u>		
Ecology	Department	University	1. The "Climate	
	of Art	Distinctive	Action" course	
		Project	conducted a	
		Application for	"Neighborhood	
		the Third Phase	Green Survey" with	
		(2022-2023) -	36 participants,	
		University Social	aimed at	
		Responsibility	understanding the	Figure 8: Horticultural Therapy
		Implementation	urban heat island	Certification Course
		Project:	effect. In	
		Ecological	collaboration with	
		Homelands and	Changhua Christian	
		Urban-Rural	Hospital, the	
		Sustainability: A	"Green	
		Changhua	Companionship"	
		Ecological Art	initiative created	
		Project. (Please	green rest areas	
		refer to Annex	along streets,	
		1.4.3G) (Figure	serving over 320	
		8)	people.	
			Additionally, in	
			cooperation with	
			Xiangshan Village,	
			three "Ecological	
			Tour Guide	
			Empowerment	
			Workshops" were	
			held, training 48	
			seed tour guides	
			and serving 78	
			residents.	
			2. On-campus Seed	
			Talent Cultivation:	
			27 seed teachers for	
			primary and	
			secondary schools;	
			22 individuals	
			obtained	

	horticultural
	therapy
	certification, and 3
	became
	horticultural
	therapy instructors.
	8 people were
	trained in video
	production and
	ecological
	fieldwork with
	drones; 4 won USR
	competition awards,
	and 8 received
	course passports.
	3. Local Seed Talent
	Cultivation: 48
	community
	ecological tour
	guide volunteers
	were trained.
I	

SDG 1.4.4 Policy addressing poverty

NCUE actively collaborates with local communities, elementary and junior high schools, vocational high schools, non-profit organizations, local businesses, and affiliated local governments to establish resource-linking platforms. Together, we formulate and implement plans and policies aimed at eradicating all forms of poverty. The university serves as a leader to related projects, supporting not only local communities, but also schools at all levels, non-profit organizations, and local enterprises. The relevant achievements are as follows:

1. In response to the global Sustainable Development Goals (SDGs), our university pays special attention to providing quality education and reducing inequality, demonstrating our commitment to social responsibility as an institution of higher education. To achieve this goal, on June 12, 2023, Princopal Ming-fay Chen led a delegation including Dean Chi-ying Lee of the College of Science, Chief Secretary Mei-chun Wen, Director Yao-chung Cheng of the Alumni Service Center, along with principals, teachers, and students from rural schools such as Yuan-dou Junior High School, Fangyuan Junior High School, Caohu Junior High School, and Taichung Municipal Shinan Junior High School, to sign a cooperation agreement with the National Museum of Natural Science.

This agreement aimed to integrate the resources of National Changhua University of Education and the National Museum of Natural Science to promote science education in rural areas, conduct scientific research collaboration, and cultivate future talents. During the meeting, Principal Mingfay Chen expressed his expectations for closer future cooperation with the museum, including self-directed learning, digital learning, and various hands-on science education activities.

To implement the "Science Charging Station - Exploring Science at Changhua Normal University and the Science Museum" project, the Science Education Center has planned a series of diverse science courses. These allow students from rural areas to gain hands-on experience at Changhua Normal University and the Science Museum while learning scientific knowledge. The activities include courses on vegetable explosion experiments, biological scent extraction, hand-made electrophoresis tanks. Other courses provided by the Science Museum include the Orchid Island section of the Botanical Garden, the life cycle exhibition, and marine umbrella: jellyfish studies. Through this cooperation agreement, science education will be more deeply and extensively promoted in rural areas.

The alliance between NCUE and the National Museum of Natural Science, through the power of education, provides fair and quality education to students in rural areas, ensuring they enjoy equal learning rights as their urban counterparts, thus continuing to fulfill our university's social responsibility (Figures 1-4).



Figure 1: Signing of MOU Cooperation Agreement between NCUE, the National Museum of Natural Science, and Multiple Rural Schools



Figure 3: Discussion on Cooperation Directions and Issues between NCUE and the National Museum of Natural Science

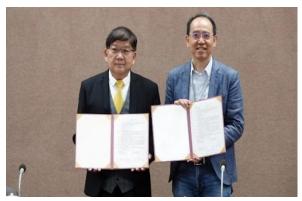


Figure 2: Signing of MOU Cooperation Agreement between NCUE and the National Museum of Natural Science



Figure 4: Student Representatives from Yuandou Junior High School in Changhua Attending the Signing Ceremony

News Coverage::

- (1) National Changhua University of Education Campus Headlines National Changhua University of Education ×National Museum of Natural Science Sign MOU to Deepen Rural Science Education Promotion
 - https://www.ncue.edu.tw/p/406-1000-22130,r93.php?Lang=zh-tw
- (2) Changhua News National Changhua University of Education ×National Museum of Natural Science Sign MOU to Deepen Rural Science Education Promotion https://www.changhuanews.com/2023/06/news-1204.html
- (3) Changhua Video News National Changhua University of Education × National Museum of Natural Science Sign MOU to Deepen Rural Science Education Promotion https://www.youtube.com/watch?v=2pKPJ9ajHdA
- (4) Yam News National Changhua University of Education ×National Museum of Natural Science Sign MOU to Deepen Rural Science Education Promotion https://n.yam.com/Article/20230612150899

2. To fulfill the university's mission of social responsibility, our "Baisha × Common Good" team has formed the "Baisha Quality Education Alliance" with 11 rural schools in Changhua, Nantou, and Yunlin counties, as well as the National Taichung University of Education. In 2023, the alliance expanded to include Lizhi Middle School, consolidating the powers of the educational strategic alliance, implementing resource integration, and enhancing the quality of rural education.

The objective was to nurture more excellent teachers, provide additional support, and address educational challenges in rural areas. In collaboration with partner schools' faculty, we designed teaching plans that incorporate local characteristics and culture, developing localized literacy-oriented and interdisciplinary curricula. This approach aimed to enhance rural students' learning ability, digital literacy, career readiness, and support systems, thereby increasing their motivation and learning effectiveness. The project embodied the holistic education spirit of the 12-year Basic Education, cultivating core competencies in rural students and achieving the ideals of "self-initiation," "interaction," and "common good."

During the summer of the 2023 academic year, we conducted week-long "Baisha × Common Good" camps at six rural elementary and junior high schools across three counties, serving approximately 260 students. Additionally, through career exploration assessment tools, we assisted about 56 disadvantaged rural students from four schools in completing individual career aspiration blueprints (Figures 5-8).



Figure 5: Group Photo at the 2023 Signing Ceremony





Figure 6: Art Class at Wanshing Junior High School



Figure 7: Bilingual Baking Class at Tianjhong Senior High School's Junior High Division Figure 8: Summer Camp Sports Meet at Tacheng Junior High School

Campus Headlines:

(1) Fulfilling University Social Responsibility: "Baisha × Common Good" Signing Ceremony with 11 Rural Schools in 3 Counties.

 $\underline{https://www.ncue.edu.tw/p/406-1000-22265,r93.php?Lang=zh-tw}$

(2) Baisha Common Good Website:

https://sites.google.com/view/ncue-teach/%E8%A8%88%E7%95%AB%E6%88%90%E6%9E%9C/112%E5%B9%B4%E5%BA%A6