

# Planting the Seeds of Creative Education in Taiwan: Some Examples of Down-to-Earth Programs

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Jing-Jyi Wu  
Professor  
National Chengchi University  
E-mail: jjwu@saec.edu.tw

## Abstract

As creative industries gain importance with the rapid technological innovations of the twenty-first century, creative education and cultural creativity skills are becoming increasingly valued. Planting the seeds of creative education in Taiwan has become a challenging task for committed policy makers, scholars, and educators. This paper highlights the foundation, existing models, and future developments of creative education in Taiwan. Specific examples from central government and local education practitioners are explained. This paper also references international models for collaborative learning and recommendations are made for the future developments of creative education.

**Key Words:** creative education, project-based learning, secondary education

## Introduction

Creativity is in essence an educational objective. To cultivate students' creativity, educational policies and practices educators have to be creative and innovative. However, in Taiwan, education has always been criticized for its lack of creativity. Entrance examinations have been blamed as the single most detrimental factor. As the creative industries become more important to the twenty-first century, creative education is valued more than ever. Therefore, the Ministry of Education (MOE) and the Council for Cultural Affairs (CCA) are under heavy pressure to promote creative education and to increase cultural creativity.

This paper highlights the foundation, existing models, and future developments of creative education in Taiwan. Foremost, this paper reviews the seeds of creative education in Taiwan. It specifically examines critical programs that have been implemented in the last few years including the Intelligent Ironman Creativity Contest. This paper also references international models, such as Creative Partnerships in the United Kingdom, for collaborative learning. Lastly, recommendations are made for the future developments of creative education in Taiwan.

## Planting the Seeds of Creative Education in Taiwan

### ***Creative Education Exhibition***

From February 13-15, 2004, the Ministry of Education in Taiwan held a Creative Education Exhibition. The exhibition was limited to 200 participating schools, educational organizations, and creative teams. Most of the booths displayed the processes and products of six initial action programs proposed in the *White Paper on Creative Education* which was later implemented at all school levels.

### ***White Paper on Creative Education***

In 2002, the Ministry of Education commissioned a pilot study on creative education. The research project was a collaborative effort that incorporated six research teams, composed of graduate students and professors, to gather available data in efforts to paint a clearer picture of Taiwan's past and present efforts in creative education. Specifically, each

team observed and studied creative education programs over a period of ten months at the elementary, junior high, senior high, and university levels, both in Taiwan and abroad. The project's results were the basis for the *White Paper on Creative Education*. Consequently, based on the strategies outlined in the *White Paper*, the Ministry of Education proposed six action plans to further the promotion of creative education.

The six action programs which actively promote creative education in Taiwan are funded primarily by the Ministry of Education, partly by other governmental sectors, and complemented by the private sector. The six initial programs include: (a) nurturing trips for creative learners, (b) professional development for creative teachers, (c) comprehensive management for creative schools, (d) creative life in action, (e) online learning via a creative resource bank, (f) ongoing consolidation of creativity cultivation. These six plans were the basis for programs from 2002 to 2006, and passed the MOE's several stages of evaluation. The Ministry will continue to fund them for another 4 years, from 2007 to 2011.

### ***From Top Down to Bottom Up Strategies –From Central Government to Local Education Practitioners***

In 2004, the scholars working at the MOE's planning office decided to enable each of the 25 counties' bureaus of education to form a team that planned and implemented creative education at elementary, junior, and senior school levels. The teams were composed of representatives from the local bureau of education, such as a curriculum supervisor, school administrators, and teachers. In addition, each county invited two professors to serve as expert consultants. This team first solicited proposals from schools in its own county and then integrated them into its county's creative education framework. The MOE provided seed money for each participating county. Each county was then invited to an oral presentation competition for funding. The areas of funding were as follows: (a) creative teachers, (b) creative students, (c) creative campuses, (d) creative think tanks, (e) cross fertilization. Cross fertilization explores and develops a unique and creative education plan incorporating local cultural strengths.

During the implementation of this program MOE panellists composed of 25 experts in related areas travelled to participating schools for a site visit. In the first year, 21 out of 25 counties submitted proposals and in the second

Planting the  
Seeds of Creative  
Education in  
Taiwan: Some  
Examples of  
Down-to-Earth  
Programs

year 24 counties participated. Every funded program is a group/team-based project. Although it varies from county to county, most down-to-earth projects were conceived and implemented by a team of teachers and administrators at each school. Starting from 2006, these teams were encouraged to form their own “community of practice” or creative clusters. By 2006, every participating county had established its own creative education website and produced the county’s *White Paper* on creative education.

### ***First Example of Down-to-Earth Programs: The Intelligent Ironman Creativity Contest***

The first domestic Intelligent Ironman Creativity Contest (IICC) was one of the highlight events at the 2004 creative education exhibition. It was so popular among high school principals, teachers and students that a second contest was held later in 2004. There were 134 teams and 756 students for the first competition. In the second contest the total number of teams and participants increased to 418 and 2788 respectively. Since then, the contest has gained enormous popularity amongst high schools.

In 2005, the contest became an international project. Thus, the first international IICC was held along with a third domestic contest. Besides Taiwan, there were 6 other teams participating from Hong Kong, Japan, Korea, Malaysia, the Philippines, Thailand, and Vietnam. In 2006, 1138 teams and 6000 students participated in the third contest. The international teams came from Germany, Hong Kong, Japan, Korea, the Philippines and Singapore.

*Purpose and Qualifications.* The purpose of IICC is to prepare future leaders with the following strengths: (a) creative and innovative, (b) cooperative team members, (c) multidisciplinary, (d) able to obtain and use resources efficiently, (e) physically strong and enduring. The main qualifications are as follows:

- The contestants can only participate as a team.
- Team membership can range from four to six members composed from different specialization such as literature, natural science, social science, physical fitness, etc.
- Each team invites their teachers as advisors to act solely as trainers and contact persons.

- Each international team designates one teacher to be an international evaluation committee member.

**Evaluation Criteria and Awards.** The evaluation panelists included experts from Taiwan and team leaders from each international team. The criteria for evaluating the final product are creativity, functions, and aesthetics. The major award is based on the final main project's product. The first prize receives NT\$200,000 (US\$6,000). Award amounts for second and third prizes are NT\$100,000 (US\$3,000) and NT\$50,000 (US\$1,500) respectively. In addition, the MacGyver Award & Enterprise Award for NT\$10,000 (US\$300) is granted.

**Characteristics.** Each team is required to go through steps including design, making money, buying material, manufacture and testing the final product in 72 hours without a break. Each team member must test their overall ability to use multidisciplinary knowledge and creativity. The contestants are isolated from communication and interaction with the outside world and provided support by a group of college students called Angels. The budget concept, time management, and daily life experiences are integrated into the contest framework. Learning is facilitated through fun activities such as adventure games, computer games, etc. Team progress is shown to the public via computer and web broadcasts.

**Procedure.** The game flow chart is shown in figure 1.

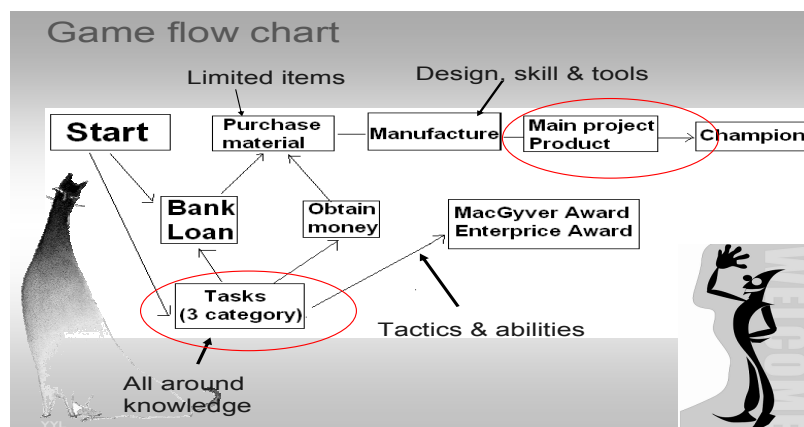


Figure 1: The Game FlowChart (Ko-Fei Liu, 2006)

Planting the  
Seeds of Creative  
Education in  
Taiwan: Some  
Examples of  
Down-to-Earth  
Programs

*Preliminary contest.* In order to complete a product for the main project, each team has to pass tasks in natural science, social science, and physical fitness to earn “money” to buy materials needed for the final product. The objective of the preliminary contest is to test the student’s fundamental knowledge, basic creativity, organizing ability, and responding ability. The final score is obtained from the main project only. Three categories of tasks team members’ fundamental knowledge are tested: (a) Natural Science: Physics, Chemistry, Biology (b) Social Science: Language, History, Geography (c) Physical Fitness and Others: Sports Skills, Music, Art.

*Themes for the main project.* Each year there must be a major theme assigned to competitive teams. The theme for each year is shown in Table 2.

*Table 2. Intelligent Ironman Creativity Contest Summary from 2004-2006.*

<i>Year/Event</i>	<i>Participating Countries</i>	<i>No. of Teams</i>	<i>No. of Participants</i>	<i>Themes for Main Project</i>
2004 First Intelligent Ironman Creativity Contest	Taiwan	134	756	“Happiness and Health”
2004 Second Intelligent Ironman Creativity Contest	Taiwan	418	2,388	“Love”
2005 Third Intelligent Ironman Creativity Contest and the first International Ironman	Taiwan, Japan, Korea, Thailand, Vietnam, Malaysia, Hong Kong	777	4,598	“Home”
2006 Fourth Intelligent Ironman Creativity Contest and the Second International Ironman	Taiwan, Germany, Japan, Korea, Singapore, Philippines, Hong Kong	1,138	6,600	“sustainability and gratitude”

The themes for the third domestic and first international contest, stage drama “home” are described by Professor Ko-Fei Liu (2006) as follows:

- Construct a stage drama with the central theme—“home.” There should be three acts. Each act must present different scenes, decorations, and names. All acts must adhere to the core concept of “home.”
- Each of the following requirements must also be met:
- Total show time should be no more than 5 minutes, with one or more of the three acts using non-linguistic methods (e.g., sound and light effect) to express the core concept.
- The stage drama must be shown within the space of 1.8m by 1.8m by 1.8m.

- A 300-word abstract, regardless of the format (e.g., poems, essays, etc.) related to the drama must be submitted.

*Main Project Panellists and Evaluation Criteria.* The panellists included experts from Taiwan and team leaders from the international teams. The criteria for evaluating the final product are creativity, functions, and aesthetics.

*Preliminary Results.* Although there are several ongoing studies that investigate the impact of the contest on the participants, only two examples which are both positive are cited here. The first is students' written responses. Here are three samples.

- (1) "This is a game to fulfill my dream to be a hero."
- (2) "I learned that team work is important."
- (3) "I had the best time of my life. In the past 3 days and I learnt to see things in differently."

Another study is employing a questionnaire and semi-structured interview (Chen, 2006). The members of the high scoring teams tend to have wider interests, creative personality traits, divergent thinking abilities, and knowledge on academic subjects. The composition of the creative teams had a balanced number of male and female students, possessing various specialties.

The winning teams tended to be intrinsically motivated to perform the tasks of the group and used more creative strategies to solve problems. They also perceived the team attitude to be lively, joyful, and energetic. This confirms the initial purpose of the project.

### ***Second Example of Down-to Earth Programs: The Youth Creative Short Play Competition***

Although the Youth Creative Short Play Competition is not a creative education project under the auspices of the MOE, it is supported by CCA. Therefore, it should also be considered as an example of planting the seeds of creative education in Taiwan.

I was fortunate to study with and work as a RA for Dr. E. Paul Torrance at the University of Minnesota from 1965-1967 and to participate as a theatre artist at LaMaMa theatre in New York City from 1969-1972. The experience and joy of combining creativity and theatre at LaMaMa enabled me to bond

Planting the  
Seeds of Creative  
Education in  
Taiwan: Some  
Examples of  
Down-to-Earth  
Programs

with a group of young talented drama lovers, the Lan Ling theatre workshop in Taiwan; from which many creative and active theatre artists/groups emerged.

The training program allowed me to initiate a CCA Youth Theatre Project as follows: In the beginning a group of theatre artists went to junior and senior high schools to share their personal theatrical and creative experiences. Following this storytelling tour was a lecture-demonstration-performance tour conducted by a group of professional actors/actresses to students at selected schools. A third creative theatre workshop was then conducted for teachers who applied theatre concepts and creative techniques to their teachings and were willing to serve as mentors for students who are interested in the Youth Creative Short Play Competition.

Another component of the Youth Theatre Project was to encourage each participating school to organize a drama club under the guidance of a professional dramatist recruited by the Paper Windmill theatre troupe and commissioned by CCA to implement the project. Since its inception in 1996 the youth theatre project has reached on average about one million students, 1000 teachers, guided 80 drama clubs, conducted 175 lecture-demonstration - performance tours, and 150 well-known dramatists' storytelling tours.

The Youth Creative Short Play Competition was the highlight of the Youth Theatre Project. The first Youth Creative Short Play Competition was held in 1999. It was discontinued in 2005 but reinstated at the end of 2006. As shown in table 3, for the last six competitions 845 teams participated in the contest. The total team members were 19,270. For each year's competition, there are usually four island-wide local contests; only 20-24 teams were selected to come to Taipei for the final contest.

*Table 3: Youth Creative Short Play Competition 1999-2004*

Year	No. of participating teams	No. of selected teams	No. of team members
2004	148	24	3093
2003	157	23	3925
2002	172	22	4228
2001	146	20	3215
2000	123	20	2829
1999	99	20	1980
Total	845		19,270



*Purpose.* The youth creative short play competition attempts to achieve the following objectives:

- (1) To appreciate and understand performing arts in general and theatre arts in particular
- (2) To utilize and develop teenagers' abilities to imagine, create and innovate through theatrical processes and productions
- (3) To learn to work cooperatively and coactively as a team
- (4) To appreciate, trust, and coordinate the strengths and specialty of each team member
- (5) To learn interpersonal skills such as self-disclosure, listening, and communication
- (6) To apply individual and team-based creative and theatrical skills to academic studies
- (7) To discover personal and group experiences such as academic study, school life, and friendship, etc., as basic materials for creative plays.

*Qualifications of the Participants.* The participants must join the competition as a team. Even if on the stage only one actor does a monologue, he still needs other team members as stage designers and so on. There is no restriction on the number of members in a team. Any ROC teenager between the ages of 13 to 19 can form a team to compete.

*Rules of the Competition.* Each team performs a five- minute original play. The theme and the contents of the play must be related to the teenagers' personal and group experiences. Any form of production, acting or presentation is allowed and encouraged

*Criteria.* The criterion includes creativity in all aspects of theatre such as script writing, acting, directing, set design, and final production.

*Awards.* There are two kinds of awards. The award for the total production is First Prize: NT\$50,000(US\$1,500), Second Prize: NT\$30,000(US\$900), and Third Prize: NT\$20,000(US\$600). In addition, seven teams are each awarded a trophy for excellent performance, without cash. Other types of recognition include seven individual's creative acting performances with a trophy and no monetary gift.

*Effects of the Competition on the Participants.* The competition impacted the development of the participants' creative abilities, team work

skills, and understanding of theatre as evidenced by their written statements. Unfortunately no rigorous study documented the effects of the competition on the participants.

Kuo (2004) did a study to compare the team's transactive memory system (TMS) between the well-known TIC100 (Technology Innovation competition one million dollars) teams (N=26), and the youth creative short play competition (YCSPC) teams (N=7). TIC 100 attracted graduate students in technology, engineering, management, and marketing to form teams to develop, produce, and market creative ideas in high technology.

The result of the study showed that the TIC 100 and "YCSPC" teams both attained high scores in demonstrating expertise, credibility, and coordination factors of tasks. Overall, the two groups revealed no significant differences. However, one finding showed the "YCSPC" team members were significantly more willing to work with the same team members if they have a chance to join the competition again the next year.

## Reflection

Planting the seeds of creative education in Taiwan has become a challenging task to committed policy makers, scholars and educators. They have already received applause as well as suspicion. The suspicion revolved around the following questions:

- Can creativity be taught?
- If students are creative, will they lack discipline?
- Can we see the creative outcomes immediately?
- How to measure creativity?
- Can we quantify the results of creative education?
- Can we transfer creative products to business?
- Would creative education interfere with preparation for entrance examinations?
- Creative education needs too much involvement and takes too much time for administrators, teachers and others. Is it worthwhile?

These are only some more obvious challenges that need to be tackled. One way to tackle these challenges is to hold team or group-based contests, or competition among students. For example, the winners of the Intelligent Ironman Creative Contest and the Youth Creative Short Play Competition have been credited for college admission. I'm pleased to say it was not our intention but a happy accident.

Since 2006 MOE's creative education programs have encouraged vocational high schools and universities to include "creativity" as a criteria for entrance examinations as part of new proposals in creative education.

## 2008 International Creative Education Exposition

The six years of implementing the initial action plans of creative education sponsored by MOE has initiated a time when transformation and new directions are necessary. To share with the public, educators, students, and others the MOE and Kaohsiung City Government held the "2008 International Creative Education Exposition" from March 5 to March 8, in Kaohsiung City. The Expo included the following components:

- (1) Creativity workshops with renowned international and local creative practitioners
- (2) Singing, artist, and student performances were simultaneously conducted
- (3) Selected creative products from the private sector were on display
- (4) 200 booths and displays were set up, based on the following areas:
  - Area One: Fascinating International Creative Center
  - Area Two: Creative products/services/design from the private sector
  - Area Three: Award-winning creative projects by schools (elementary to university)
  - Area Four: Outstanding creative projects and programs by 25 cities and counties
  - Area Five: Hands-on interactive experimental games for parents with children

All booths and displays were designed and managed by teachers and students at all levels of schools. The total audience was estimated to be around 100,000.

Planting the  
Seeds of Creative  
Education in  
Taiwan: Some  
Examples of  
Down-to-Earth  
Programs

## **Existing International Programs**

Program emphasizing both the arts and creativity and their mutual relationships include Creative Partnerships in the United Kingdom and Innovative Arts Education in the United States. These are examples of international programs that Taiwan can learn from.

### ***Creative Partnerships***

Creative Partnerships in the United Kingdom is a government-funded creative learning program. The focus of the program is on building sustainable partnerships “between schools and creative professionals, including architects, scientists, multimedia developers and artists. These partnerships inspire young people, teachers and creative professionals to challenge how they work and experiment with new ideas” (Creative Partnerships, 2009). Creative Partnerships has four stages for schools, and the program has worked directly with more than 2,700 school across the United Kingdom since its establishment in 2002.

### ***Innovative Arts Education***

The San Francisco Unified School District exemplifies an international model of creative education. The school district partners with local artist and community resources to provide innovative art education programs throughout the school system. The San Francisco Unified School District Arts Education Master Plan aims to provide a “comprehensive sequential arts education from pre-K through grade twelve” (SFUSD, 2009).

## **Future Developments**

After implementing several programs and hosting successful expositions, areas for future development need to be outlined. This includes funding sources, mass appeal, workplace preparation emphasis, and examining existing programs in other countries.

### ***Diverse Sources of Funding and Contributions***

Although we have tried with success many differing funding approaches to implement our plans, the government still plays the dominant role. Almost

all funds come from MOE. Since 2008, the local creative education program is the only activity funded by the MOE that involves all 25 island-wide counties and cities. The emphasis at this stage of development is for all creative and innovative projects to be diffused into as many classrooms and schools as possible. The Intelligent Ironman creativity contest, for example, will be independent financially from MOE's annual budget. Instead, professors and teachers who have been active in the contest will establish a NPO specifically to run this contest.

Planting the  
Seeds of Creative  
Education in  
Taiwan: Some  
Examples of  
Down-to-Earth  
Programs

### ***Bringing Theater to the Masses—A Work in Progress***

Another example of soliciting financial support from other sources was the Paper Windmill Children's Theater implementation of a very socially innovative project entitled "First mile, kid's smile". They brought professional children's theater to perform at every one of the 319 towns in Taiwan. As long the town has received \$11,000 (NT\$350,000) donation, the Paper Windmill Theater would perform. By June 1, 2008, the total funds amounted NT\$68,823,006 (more than 2 million U.S. dollars), donated by 10,589 individuals/organizations. The total audiences amounted to 223,700 participants. Remarkably close to one third of the population of all towns viewed the performances.

### ***Creativity in the Workplace***

More emphasis is needed in preparing young people to learn from the arts and creativity to succeed in the workplace and wider society in the future—a project presently being conceived. At present the importance of creativity and innovation in the workplace is better recognized. However, the importance of the arts in future workplaces and society seem to be practically ignored. Dr. Ernest Boyer of the Carnegie Foundation for the Advancement of Teaching, expressed this by saying: "During our visits (to schools) we found the arts to be shamefully neglected. Courses in the arts were the last to come and the first to go." There are also numerous examples from industry leaders that echo the call for arts education and creative development.

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