An Introduction to the Energy Education Promotion of

WanLi Elementary School

C.S. HSU Member of NTPEECG

Introduction-the turning point

Energy has been the foundation of 20th century human civilization. To what extent of chaos can this world would become, if there had not been any petroleum, nuclear power, coal and electricity at all? Probably, the end of civilization could be near. We have to admit that people nowadays cannot live without energy. But what treacherous is that the more energy we have consumed, the more violentlythe nature will fight back.We can see extreme climates, droughts, record-breaking raining and hurricanes take place with increasing frequency. In comparison with Mother Nature, all the human beings doing are insignificant important. Struggling to survive has become the humblest hope for those who had suffered from those disasters.

If education is the hope of human future, schools will be the platform to make it real. Energy education is a deeply interwoven global issue. As educators, we should emphasize on how to transfer the issue effectively into curriculum and practice it in our daily life. Furthermore, we should target on family-rooted change, community transformation and sustainable homeland development. This is also the turning point of Wanli Elementary School energy education.

Brainstorming-establishing local curriculums

From a teacher's point of view, to develop school—based curriculums effectively, we should start from these phases, environment characteristics, local resources and school contexts. For example, Wanli Elementary School is located on the path of north-east monsoons, near 2 nuclear power plants. With the natural strong winds, the resources from Taiwan Power Company and experiencing learning development in school, we can focus on wind power—the future energy. As a result, energy education of wind power has become the core curriculum of our school.

The main frame of Wanli Wind Festival 2014, a creative energy saving and carbon reduction course is indicated as the following chart.



During the process of the course, there are 3 principles should be maintained.

1. Generalization

Various activities of learning generated from the core idea are adopted in the curriculum. The purpose of these activities is to link the learning across different grades.

2. Cooperation

Every student has to cooperate and to discuss in groupsto complete the activities. Through the process of learning, everyonelearns tocommunicate and toaccomplish their work with one another cooperatively.

3. Manipulation

Students need to observe, record, manipulate, calculate, verify and produce outcomein the courses. Guided by the STEM teaching process, teachers look forward to bringing students the awareness of scientific examination and the creativeness of life practicing.

Accompanied with the curriculum, we also formed a teaching community led by Principal to integrate the school administration faculties with the teachers. Through professional conversation, reflection and feedback, we have been promoting related teaching programs and activities as well as bringing out significant results. We have scored with flying colors in the energy saving and carbon reduction teaching plans competition. Undoubtedly, it meant dearly to us.

Envision—for the education of future generation

In some conference on teaching plans, one member of the committee stated that, "You have been continuing your program for more than five years. Haven't you got tired? What was the motivation that drove you insist on this?" To answer the question, I always quote my colleague's remark, "We can achieve more and higher goals than we can imagine. Children'sfeedback is far more abundantthan our lecturing. So,just do it!" For teachers in Wanli Elementary School, education is not only to make those outstanding kids more brilliant, but also to guide accordingly for those who are in need. We should provide as many opportunities as possible for our children. Meanwhile, we should endeavor to dedicate our power of education to make the world a better place.