

Development History

Chronology of Nanotechnology human resource development program

2003

"National Nanotechnology human resource incubation program" was officially initiated. Five regional centers in north, central-north, central-south, south, and west areas were operated. "K-12 education development program" and "Nanotechnology prospective human resource development program" were synchronizably promoted.

2006

Started collaboration with private industries to offer Master's Degree for nanotechnology-related Industries. In the same year, many events were held in order to promote nanotechnology education, such as science camps in and out of schools, teacher workshops and writing online teaching materials. The K-12 Teachers' Conference on Nanotechnology held that year allowed teachers across the country to share their teaching experiences and methods with other teachers and professors.

2009

Phase II of the Nanotechnology Education and Training Project, NPNT was coordinated by the Department of Science Education, NSC. They not only brought together and continued the fruitful results of Phase I, they also expanded the scope of the project and introduced new implementations. This project developed courses in nanotechnology through fundamental research and education, in addition to establishing the Center of Pedagogical Content Knowledge to advance teachers' knowledge of nanotechnology. At the same time, building fine learning environments for nanotechnology in order to achieve the goal of promoting popular education as well as advancing people's knowledge of nanotechnology.

2004

Combine with the community education resources, such as Taiwan Science education center, National Museum of natural science, and National Science and Technology Museum, "National nanotechnology human resource development promoting project office" and several digital learning platforms were set up by Ministry of Education advisory office to build a solid foundation for our nanotechnology education.

2007

Published a wide range of new educational materials on nanotechnology, enabling teachers to teach students using the rich pictures and multimedia, in addition to hands-on experiments. Moreover, the National Nanotechnology Innovation Competition held by the Frontier Educational Program received enthusiastic response.

2010

Promoting fundamental research and education in nanotechnology. The project has already developed teaching strategies, such as curriculum maps and curriculum concept maps, to establish the foundation for the quality of nanotechnology teaching materials. In the field of promoting popular education, several nanotechnology experiment models have been produced to improve learning efficiency. In recent years, we have continued participating in the International Nanotechnology Exhibition & Conference in Tokyo, Japan. Through exhibiting project results, we have achieved the goal of spreading the results of promoting Taiwan's nanotechnology education, in addition to inducing International communication and multilateral collaboration.

2005

Completed training for more than one thousand seeded teachers, in addition to publishing several multimedia educational materials and CDs.

2008

The design of K-12 education transitioned from a supplementary subject into an integrated course. The Education Development Centers in various places designed practical training courses suitable for high school students. They also collaborated with partner colleges and universities in giving interdisciplinary courses, employing methods such as distance learning and digital tutorials to improve learning efficiency. In addition, the Education Development Centers integrated neighborhood resources, such as the National Taiwan Science Education Center, the National Museum of Natural Science, the National Science and Technology Museum, in promoting nanotechnology education, co-organizing nanoscience camps and exhibitions of project achievements, giving more people the chance to discover new information on nanotechnology.

Phase I

Phase II