



<http://gk12.asu.edu>

International component of ASU's GK-12 Partnership

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Features of ASU's GK-12 Partnership with Taiwan

1. Built on foundation of strong collaboration in Nanotechnology research and education
2. Blessing of Taiwanese Government
3. Strengthened by mutual visits of teachers

Global Competitiveness and Collaboration in Nanotechnology R & D



Interactive NanoVisualization for integrating
Research and Education

[HTTP://INVSEE.ASU.EDU](http://invsee.asu.edu)

Global Accessibility of Nanotechnology Education

Cyberinfrastructure for crossing geographic and temporal barriers



Visit of Taiwanese Delegation to Arizona

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

Taiwanese chemistry professor's

Reflections

captured in interviews to the local media

“I am very interested in seeing inquiry-based science instruction inside U.S. classrooms and the role of graduate students”

“In Taiwan, the school environment is very structured, with students in a classroom and then a laboratory setting, with little interaction. The way the teachers teach and the way the students interact with each other and with the teacher is very inspiring, very new to me, she said. It is also very fun”

Taiwanese K-12 teacher's reflections

A seventh-grade biology teacher in Taiwan, said US classrooms looked very different from what she is used to.

“In Taiwan, there are general protocols and everyone follows them. The students all get the same results. Here, there is a lecture and students ask questions and think about what will happen. This is simple, different, but very creative and effective.”

Cross-Cultural Understanding Protocols, Hospitality and Gift Exchange



Teaching in Schools



Visit of GK-12 Fellows and Teachers to Taiwan

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Arizona Teacher's Reflections

“I had the erroneous belief that Taiwanese classrooms would be very formal and stale with students sitting attentively and quietly absorbing knowledge from the stern teacher. I thought it would be a very authoritarian environment where the teacher ruled supreme. Instead, the classes I observed had very similar culture to that of most classrooms in the United States”

GK-12 Fellow's Reflections

I made long lasting friendships with graduate students doing research in Bioengineering and related fields.

The learning environment in K-12 in Taiwan is wonderful with high morale of teachers.

I was struck by the enormous respect and rewards that K-12 teachers are afforded by Taiwanese society.

Grass is greener on the other side

Curiously enough....

the editorial pages of newspapers in US raved about how well Taiwanese and Singapore students are doing in international tests such as TIMMS and

around the same time Taiwanese and Japanese newspapers were reporting how they should should model their K-12 teaching after the inquiry based active learning in US schools!

Challenges and Opportunities

Challenge

Time difference

Language Barriers

Institutional and Cultural differences

Opportunities

Cyber Infrastructure

Visualization, Translation

Global Perspective

New Developments

- Translation of lessons from Chinese to English and from English to Chinese
- Science and Math Teacher Exchange
- Beginning of the Integration of Taiwanese graduate students into the Nanotechnology K-12 program
- Videoconference with K-12 class in Taiwan with our K-12 teachers on topics such as Sustainability- a topic that is truly global in scale
- Taiwanese Graduate Student studying at ASU