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How Career and Technical Education Can **JUMPSTART A NEW INDUSTRY**

Chinese Government Turns to Career-Focused Schools in Maryland for Video Game Industry Training

BY LAWRENCE M. GLENN AND F. MARTIN NIKIRK

While career and technical education (CTE) has been an important part of the U.S. education system for decades, other countries have been slower to adopt and develop similar types of training. Realizing that CTE is crucial to developing homegrown talent capable of competing in a 21st century economy, countries like China are reaching out to career-focused schools in the United States to assist them in developing CTE programs in order to introduce, grow and sustain industries that are new or have limited presence in certain Chinese provinces.

“While there’s much discussion about career and technical education in the United States, little is said about it in other countries,” said Larry Glenn, director of workforce development at Kaplan University’s Hagerstown, Maryland, campus.

Seeking to develop and grow a domestic video game industry, the Chinese government reached out to Kaplan to learn how career-focused schools in the United States train students to work in this highly technical and growing field.

Training

Kaplan has been working with the Chinese government for nearly three years to create customized training programs for multiple government entities in a variety of subject areas. The campus is one of 12 postsecondary institutions in the United States, and the only career-focused school approved by China’s government to provide educational training. (Other approved schools include Harvard and Georgetown universities.) In November 2006, the campus developed a specialized training program for Chinese security forces preparing to manage safety and security for the 2008 Summer Olympic

Games in Beijing.

“Our training program for the security forces was well designed and effective, helping us to generate more opportunities to work with the Chinese government,” Glenn said. “These opportunities include the video game industry training programs we recently delivered.”

Kaplan was asked to create two separate training programs for delegations hailing from Guangzhou City of the Guangdong Province, and Qingdao City of the Shandong Province. Although each province had its own standards and preferences, both had the overall goal to build and sustain its own video game industry—a goal each province knew required the creation of a proper CTE program to train students, according to Glenn. During their training in Hagerstown, the delegations participated in classroom instruction, interacted with industry professionals, and visited a variety of studios

and schools. They then traveled to Los Angeles and various locations along the East Coast to visit a television station, in addition to video game, graphic design, animation and production studios. In a bid to learn how U.S. schools train their students to enter the video game industry, each delegation also visited the University of Southern California to observe its master’s degree programs.

They received training at Hagerstown’s Washington County Technical High School, which offers a game development and animation program for 11th- and 12th-graders. The school collaborates with Kaplan’s Hagerstown campus to provide international exchange and training programs for the Chinese government.

Guangdong Province Delegation

The first training program was developed for the Guangdong Province, which had

already completed a province-wide strategic plan calling for the development and perpetuation of a graphic design, animation, production and video game industry; at the time, this industry was only in its beginning stages within the province.

“Through our training, the delegation hoped to understand the steps necessary to grow the existing industry and internally support it within the province by learning how to create new resources locally,” said Glenn. “We demonstrated how these new resources, such as technical expertise, could be acquired by duplicating the development techniques and technology used in the industry within the United States.”

Kaplan’s training, which lasted 10 days, aimed to show the delegation how to create a CTE process capable of supporting this new industry. The institution shared how it develops students for the industry and how instructors are trained.

The province wanted to develop for-credit education programs beginning at the high school level and focus on the three-year college level—the Chinese equivalent of an associate degree. The goal for these programs is to produce graduates ready for entry-level employment in the summer of 2011, therefore creating a steady stream of qualified employees by the end of 2012. The program would eventually expand at the college level to be offered at traditional colleges and universities, as well as technical colleges.

Qingdao City Delegation

When the Qingdao City delegation came to the campus for training, Qingdao City had no video game industry in place. Through the 15-day training it received at Kaplan, the delegation was taught how to successfully introduce this new industry to Qingdao City and identify which industry elements could become self sus-



▲ Chinese delegation at Washington County Technical High School.



▲ Chinese delegation at Kaplan University Hagerstown campus.

taining within five to eight years. From the training, the delegation determined the number and quality of technicians required to establish and perpetuate the video game industry within the city. Knowing that the creation of a career-focused program is necessary to accomplish this goal, the delegation plans to leverage Qingdao's existing educational and training system to build a non-credit certificate program available at high schools, colleges, technical colleges and universities. Ultimately, the non-credit program will evolve into a formal degree-granting program beginning at

the primary level, continuing through the secondary and then postsecondary level. This approach would allow for the non-credit program to produce graduates by the end of 2009. The delegation also learned how to contract and market a graphics, animation, production and video game industry on an international level.

Delegations Connect With High School Students

Both delegations spent time at Washington County Technical High, which developed Maryland's first high school game

development and animation program. Students study everything from creating the game concept to the art, music, engineering and marketing of a final product.

"It's a world-class, one-of-a-kind program that established the bar for other programs yet to come," said F. Martin Nikirk, teacher and developer of the game development and animation program. "It clearly displays the career and technical education process necessary to develop and sustain this technically demanding industry."

For the delegations' visits, students prepared presentations and demonstrations of various animation techniques. The visits provided a valuable international cultural exchange opportunity for both the Chinese visitors and our students; students researched Chinese business etiquette and trade practices, including how to drink tea.

During the training, students presented examples of 2-D animation created in Adobe Photoshop, Adobe Fireworks and Microsoft PowerPoint, including winter animated stories and games they had created for the public and for patrons of the Washington County Public Libraries. Students demonstrated and explained 3-D animations and simulations built in Google Sketchup and Autodesk 3dsMax. The students even got to put their tea-drinking etiquette to the test.

"During tea time, our students and the delegation members were afforded an opportunity to discuss differences in culture with one another," Nikirk said.

Action Steps

Since the training, both delegations have started to make progress in developing a video game industry within their regions. In Guangdong Province, curriculum development for CTE programs has begun and several schools have been selected to implement the pilot program. Training will begin with the start of the 2010 school year and will be phased in

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over a three-year period. Initial province-level planning is complete, and follow-up planning took place this past summer.

In Qingdao City, curriculum for the non-credit certificate program has been developed and was shared with all schools participating in the pilot program. Training began in January 2009, and the first set of students graduated September this

year. To help both delegations continue in their progress, Glenn makes periodic trips to China to visit the schools piloting the CTE programs. A third-party company in China also assists the delegations as they build their video game CTE programs.

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- Julia Ray, Dare County Alternative School, Southern Shores, NC

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