

# Improvement of College Physics Education Using Computer Technology in China

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## Abstract

It is difficult for students to image some complex physics phenomena. In recent years China has begun to reform college physics education using computer technology. In the Essential Requirement for College Physics, issued by Ministry of Education of China in 2006, the use of the computer technology, multimedia and Internet, is required for physics teaching. As an example, the developments and applications of *Multimedia Courseware of General Physics (CHN)* will be described in my presentation.

This multimedia courseware use computer software such as the flash and 3-Dmax to clarify physics concepts and making them visual and easier to understand. In physics teaching there are time and space limitations. It is well known that video can show reality repeatedly. Both teachers and students can save time and broaden their experience using video. Time-consuming experiments can be shown in a short time; physical experiments that require expensive equipment or are difficult to carry out in an ordinary classroom or lab can be demonstrated.

Although the underlying fundamental physical principles typically presented in a physics course are stable, the developments and applications are continuously updated. It should be noted that the Internet could be an effective mean to search for frontline material for physics teaching. In our paper some examples of improvement of college physics education using computer technology will be presented.