



# The Strategic Value of Standards Education

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“The Future of Global Education in Standards”

Tokyo, Japan, February 2006



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# Standards are a Bridge



Needs:  
consumers,  
companies,  
industries,  
governments,  
testing &  
certification .



Science &  
Technology:  
creative ideas,  
concepts, values,  
perspectives,  
methods,  
products  
& services

**Standards form a bridge between technology and the needs of users. Whoever controls the bridge controls markets for products and services.**



# The Value of Standards

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- Standards influence everything we do. (UK National Standards Policy) [Note: 2004 world income was approximately \$40 trillion (US) for all goods and services (World Bank)].
- Standards control markets. (Germany National Standards Policy)
- “If you control an industry’s standards, you control that industry lock, stock and ledger.” (Dr. Edwards Deming (US))
- Standards directly affect more than 80% of the \$7 trillion (US) market for global trade. (US Congress)



# Standards education in Asia

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## ■ **Asia Link Programme**

- Joint academic project among universities to develop standards education program using internet technology: China, Germany, Indonesia, Sri Lanka, Netherlands, & Vietnam. (Funded by the European Union)

## ■ **Japan**

- Conference – “The Future of Global Education in Standards”

## ■ **South Korea**

- 2005 - standards education program in 40 universities with participation by more than 2000 engineering students.



# Standards education in Europe

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- European Commission Academic Network for Standardization
- International Electrotechnical Commission
  - 2005 – distribution of lectures on the significance of international standards to 165 member countries all over the world.
  - 2006 – IEC *Centenary Challenge* [gather, review and evaluate research papers from all over the world on the value of standards]



# Standards education in North America

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- ABET (US)
- American National Standards Institute (US)
- American Petroleum Institute (US)
- American Society for Testing & Materials (US)
- Canadian Standards Association
- National Institute for Standards and Technology (US)
- Standards Council of Canada
- Standards Engineering Society (NORTH AMERICA)



# United States Standards Strategy

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- *Establish standards education as a high priority within the United States private, public and academic sectors. (United States Standards Strategy, Section 10 (2005))*





# Current Educational Focus

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- Engineering, science & technology are the current focus of standards education.
- If standards influence everything we do, why shouldn't standards education programs for executives and managers in business and government be a primary focus?
- Why shouldn't other academic areas such as government, economic policy and law be a primary focus?



# Educational Content

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- Procedures & due process – balance, fairness, openness and transparency.
- Engineering, science & technology.
- Business, economics & international trade.
- Political and social issues.
- Public policy & legal considerations.
- World Trade Organization.



# Multidisciplinary Environment

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- If global standardization is a political, economic and social negotiation process, do standards education curriculums include content that develops negotiation and communications skills in a multidisciplinary environment? If not, why not?



# Education Forums

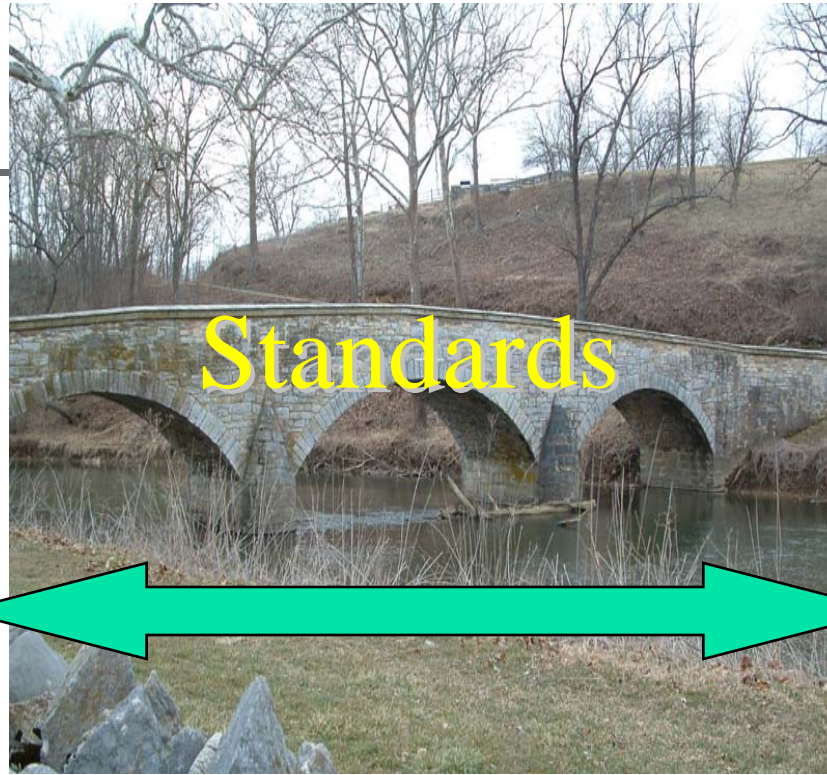
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- Most standards education programs are designed and intended for a classroom.
- If standards influence everything we do, why not develop a flexible menu of options for all interested parties (business, government and academic sectors) using internet technology for 24/7 access?

# Strategic Links & Connections



Needs:  
consumers,  
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Science &  
Technology:  
creative ideas,  
concepts, values,  
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**Standards form a critical link and connection between technology, business and the needs of users. Standards education is a critical link in understanding the effective development of global technology standards.**



# Global Marketplace

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- If the global marketplace is going to be dynamically transformed during the next several years, which nations do you think will be better prepared to negotiate complex global standards which are the foundation of the marketplace? Nations which invest in standards education initiatives, or nations which do not?



# Contact Information

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