



UTM

OPENCOURSEWARE

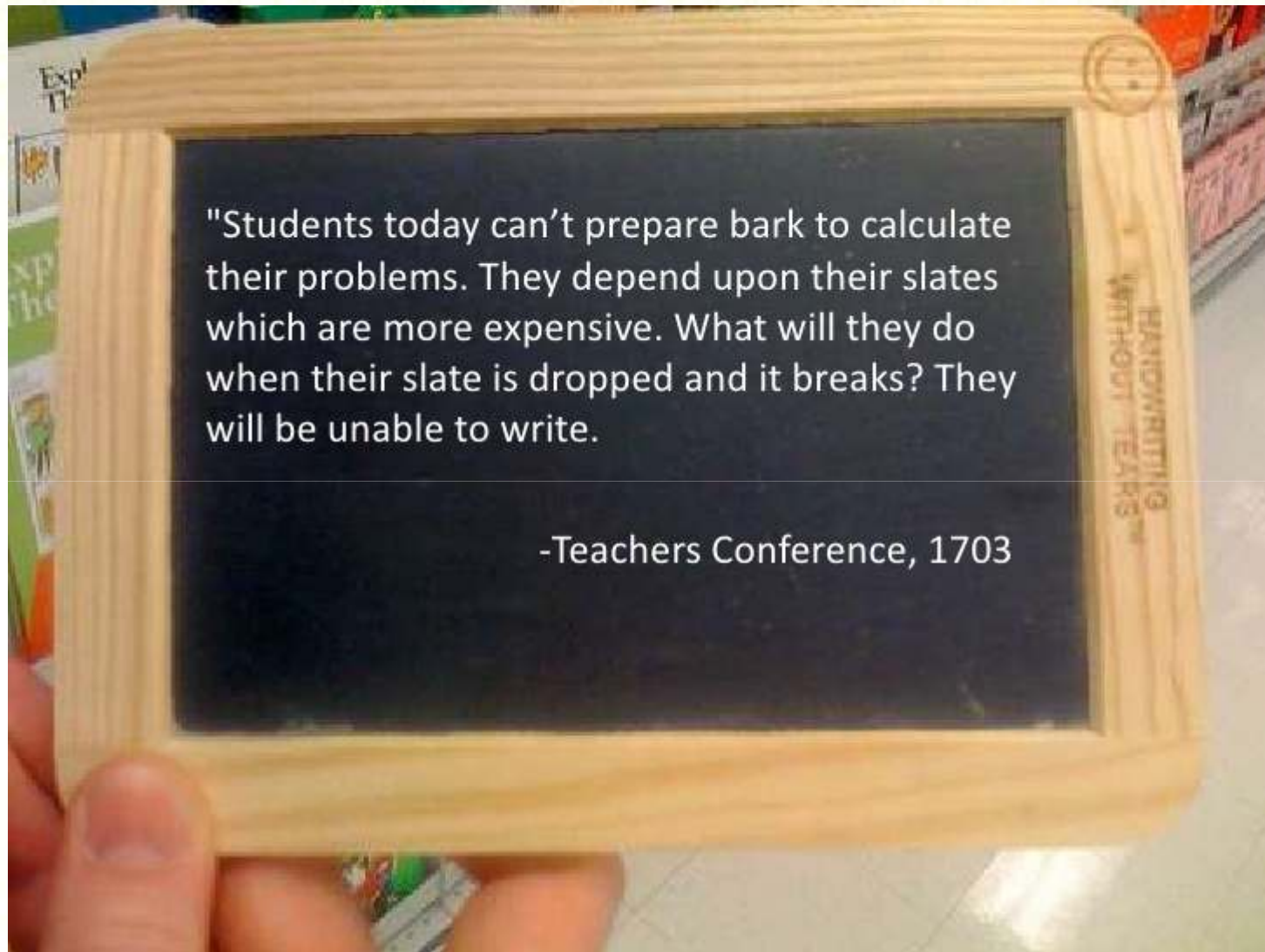
Education as an asset & Education and Technological Change

MPF 1353

Economics and Education

- Khoghila a/p Gopalan
- Noorasyikin bt Mohd Nor
- Zainudin Hassan







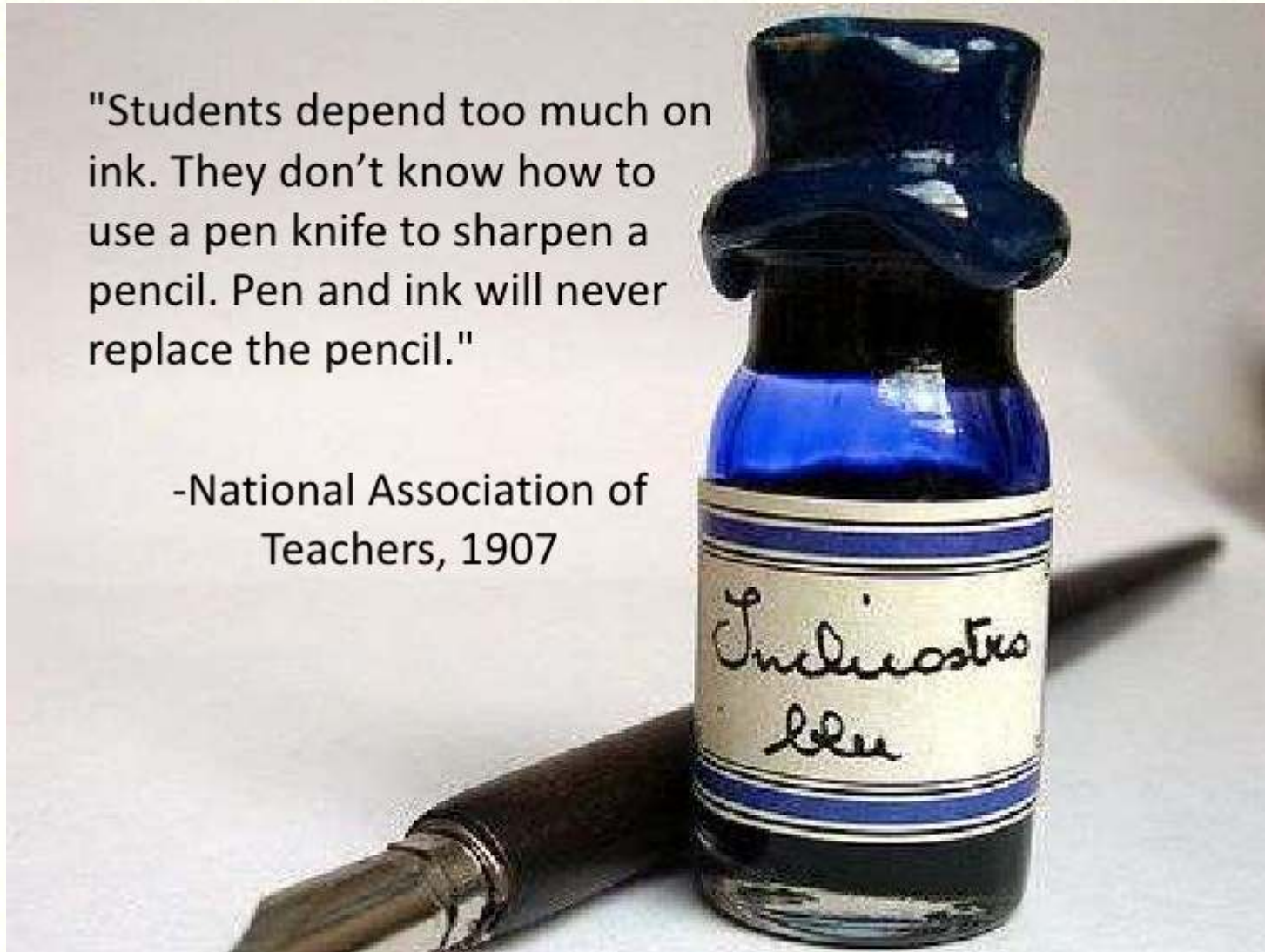
"Students today depend upon paper too much. They don't know how to write on slate without getting chalk dust all over themselves. They can't clean a slate properly. What will they do when they run out of paper?"

-Principal's Association, 1815



"Students depend too much on ink. They don't know how to use a pen knife to sharpen a pencil. Pen and ink will never replace the pencil."

-National Association of
Teachers, 1907





"Ball point pens will be the ruin of education in our country. Students use these devices and then throw them away. The virtues of thrift and frugality are being discarded. Business and banks will never allow such expensive luxuries."

-The Federal Teacher, 1950

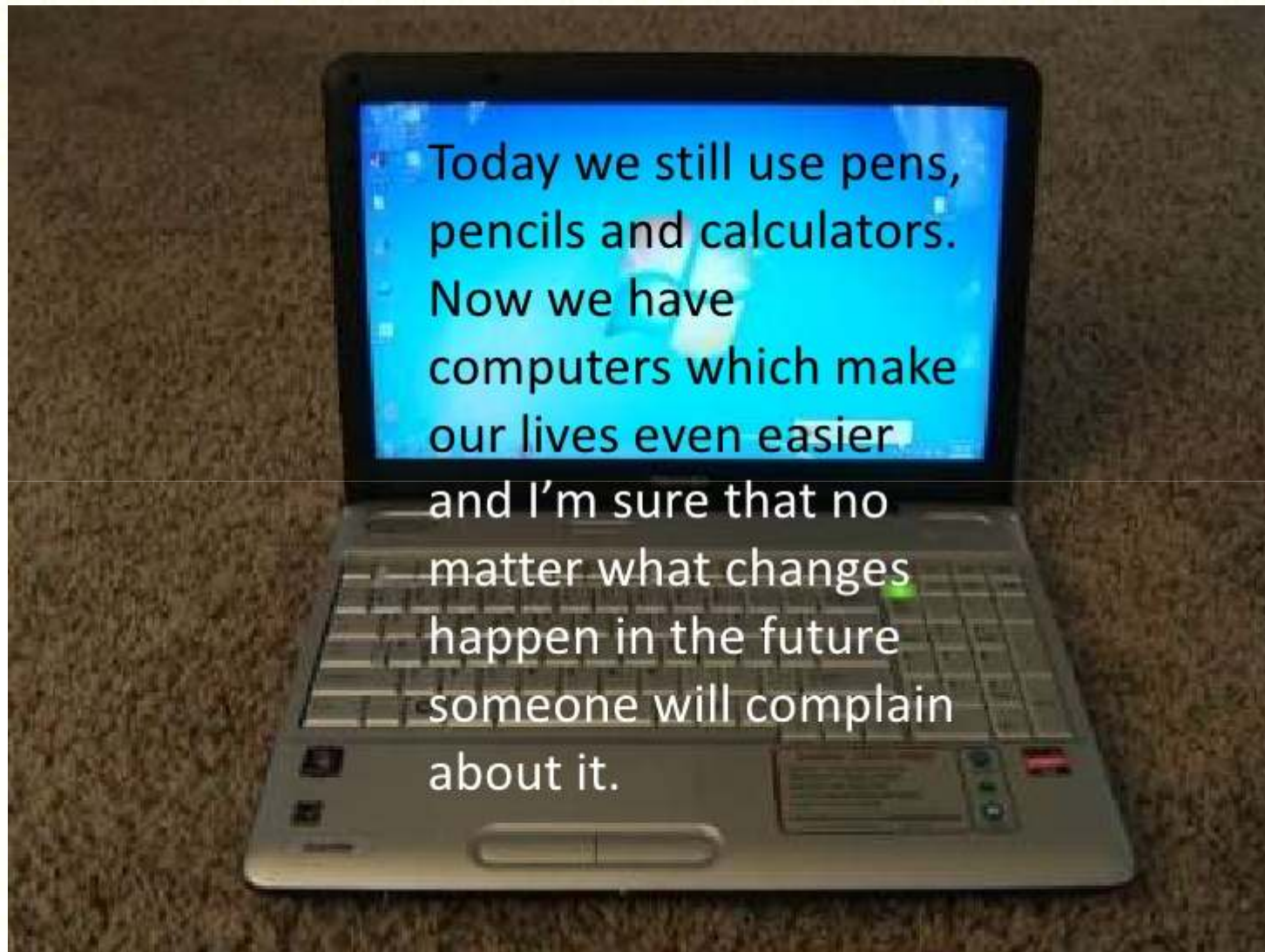




"Students today depend too much
on hand-held calculators."

-Anonymous, 1985







Education in its general sense is a form of learning in which gives knowledge, skills, and habits of a group of people are transferred from one generation to the next through teaching, training, research, or simply through experinces.



Traditional & E-learning Approach

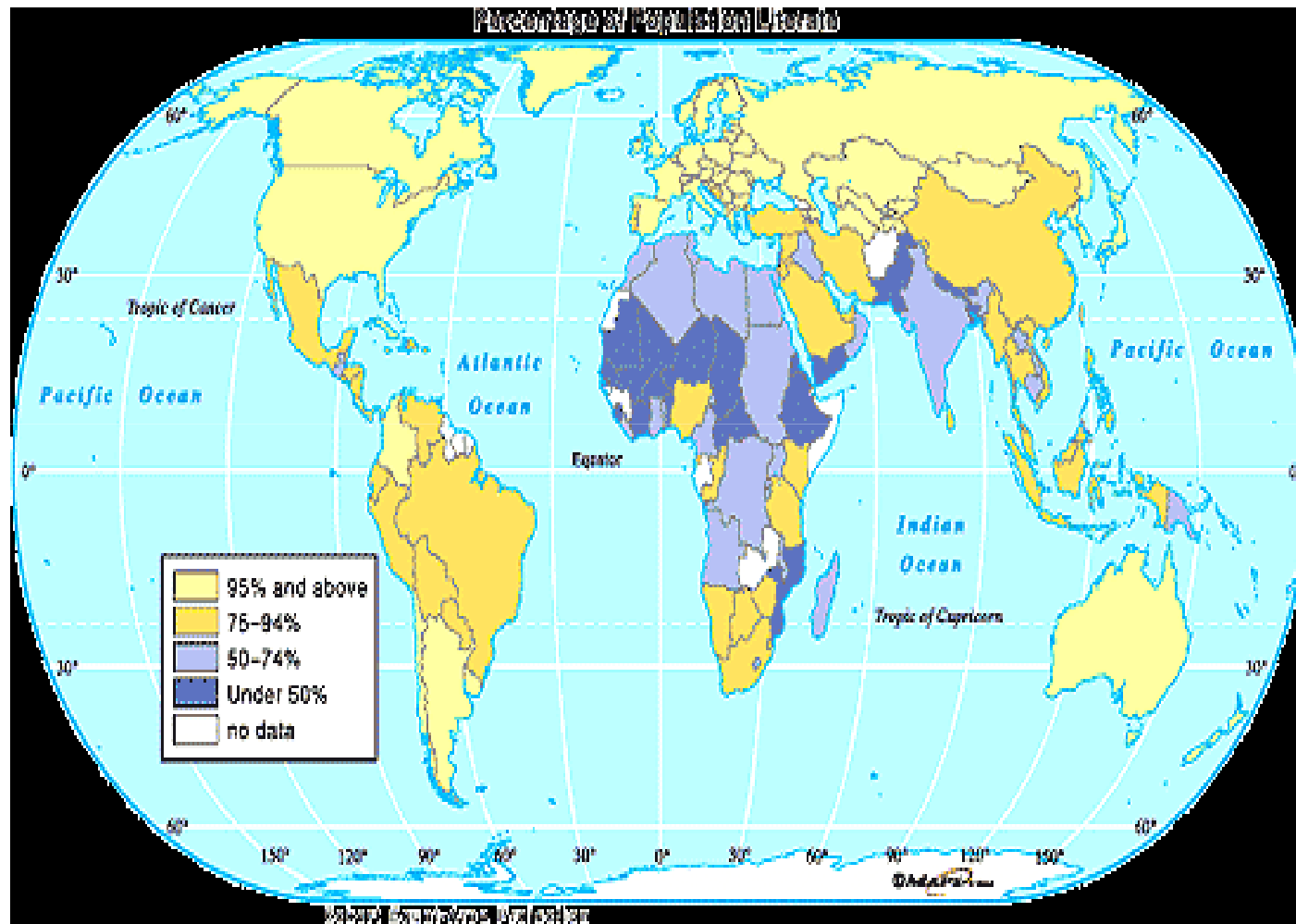
Traditional and E-learning approaches

	Traditional Classroom	E-Learning
Classroom	<ul style="list-style-type: none"> • Physical – limited size • Teacher based activities 	<ul style="list-style-type: none"> • Unlimited • Anytime, anywhere
Content	<ul style="list-style-type: none"> • PowerPoint/transparency/etc • Textbooks/library • Video • Collaboration 	<ul style="list-style-type: none"> • Multimedia / simulation • Digital library • On demand
Personalisation	<ul style="list-style-type: none"> • One learning path 	<ul style="list-style-type: none"> • Learning path and pace determined by learner

Education as an asset

- To determine a country's development, these statistics are usually considered by the United Nations
 1. GDP (Gross Domestic Product)
 2. Life Expectancy
 - 3. Literacy Rate**
 - 4. Education**
 5. Healthcare System

World literacy rate



Technology in education

- First computer used for instruction – 1950
- First computer used with school children – 1959.
- The term computer literacy is coined – 1970.
- World Wide Web is born - 1994.
- Online learning and distance learning increased in higher education from year 2000.

HOW CAN TEACHERS USE TECHNOLOGY IN THE CLASSROOM

Technology use in teaching

⊗ **Using PowerPoint**

- For teaching lessons
- Giving students visual aids of the topics

⊗ **Using Internet**

- To find information
- To download websites

For example, good websites for teachers teaching K-3 may use:

www.starfall.com

www.funbrain.com

⊗ **Sending e-mails**

- To maintain communication with students
- To maintain communication with parents of your students

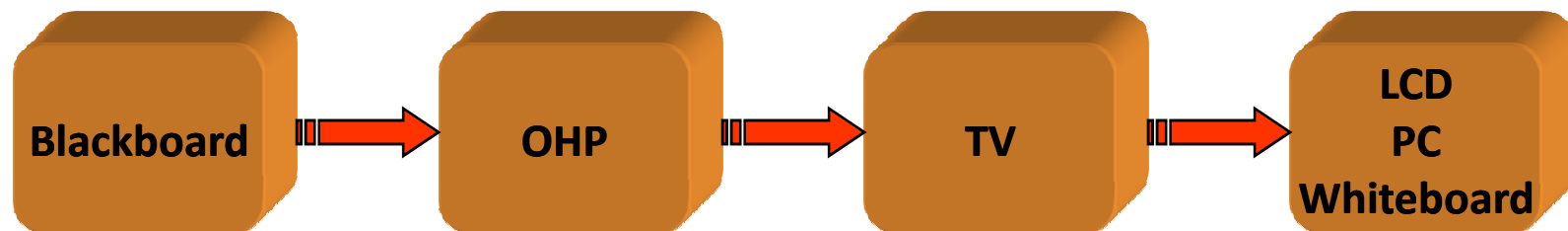
⊗ **Watching a movie**

- Downloading video for educational and entertaining purposes in the classroom

www.youtube.com

Education and technological change

- Technology symbolizes advancement in human knowledge.
- Many different type of technology been used to support and enhanced learning.



Examples of technology used in the education system are:-

- ❑ Computer, laptop, and tablet.
- ❑ Mobile devices.
- ❑ Blogging
- ❑ Audio and video
- ❑ Learning management system.

Technology impact on education

- Knowledge can be easily received with the help of Internet technology now
- Personalized learning is much easier. Students can pick their own curriculum with ease, and set their own personal targets.
- Distance learning has become much easier, and this has led to a rise in the number of people who receive education.
- E-learning and online education has made it very simple and systematic for an individual to receive personal attention, so that all his specific needs are fulfilled.
- Immediate response to queries and tests have made the whole education process a lot faster.
- The use of computers and technology in classrooms has opened up a whole new method of teaching and effective learning.

National ICT Agenda

PEOPLE

- Work Culture
- ICT Skills
- Knowledge worker
- Learning Society
- United, moral & ethical

INFRASTRUCTURE

- Communication
- Fibre-Optic Cabling
- Gigabit ATM
- Satellite
- Transport/Logistic
- etc

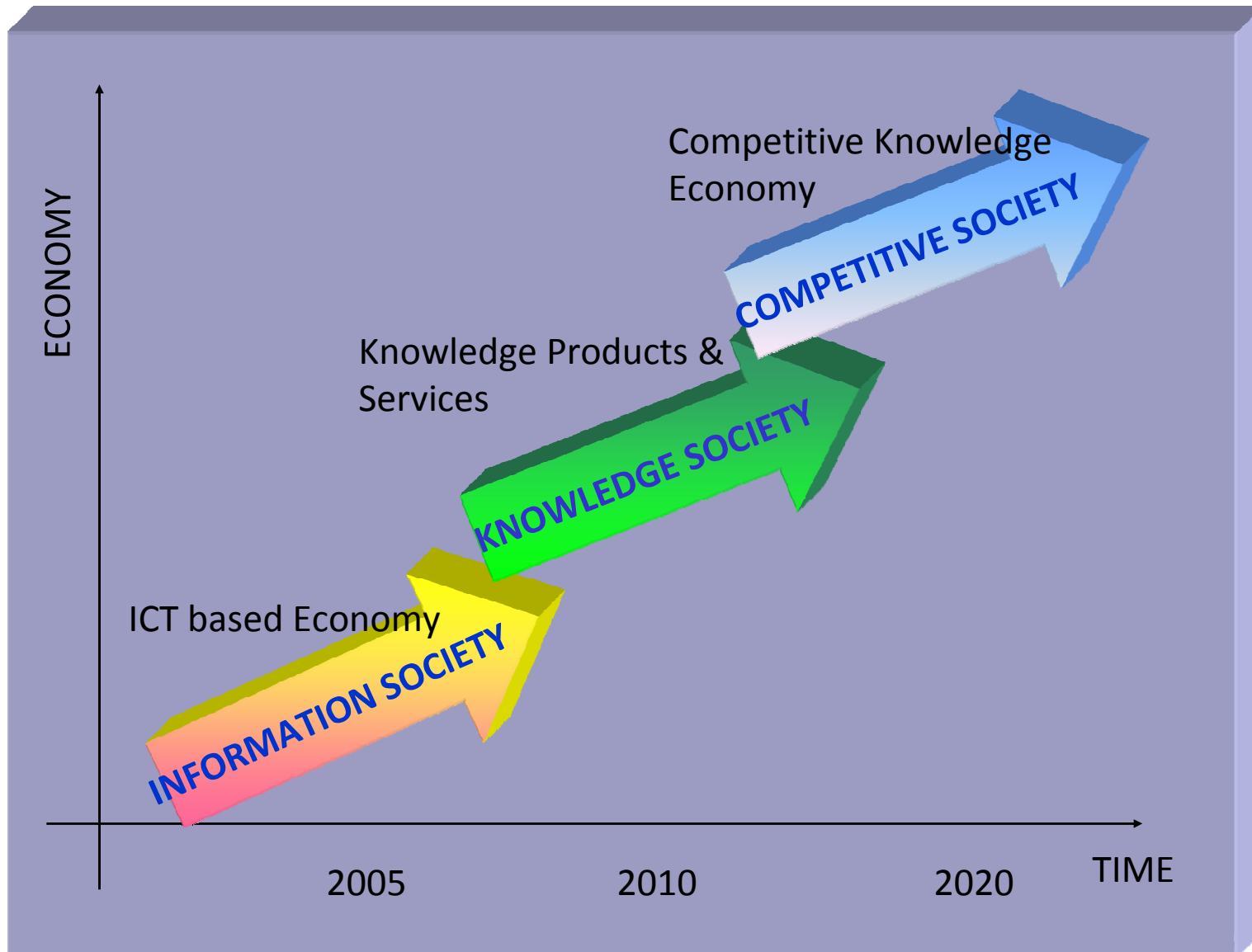


**KNOWLEDGE-BASED
ECONOMY**

APPLICATION & CONTENT

- Smart Schools
- e-govt.
- Smartcard
- Tele-medicine
- Others

NATION'S ICT EDUCATION VISION



E-learning studies in Malaysia

- In an on-line multimedia learning environment:
 - teaching & learning is 'one-to-one' (individual)
 - more interactivity (in normal classroom, it varies with the class size)
 - learner-centred
 - Learner monitoring & grading system

Benefits

- **Convenient**
 - self-service (mix and match)
 - on-demand (anytime, anywhere)
 - private learning
 - self-paced
 - Flexibility: (modular package)
- **Consistent**
 - Central control of content
 - Same quality of content for all
 - Same quality of education for all

Benefits

- Cost-effective
 - Virtual learning environment
 - Share lessons among schools
 - Reduce material cost
 - Reduce travel/accommodation costs
- media-rich
 - Easier to understand & more engaging
- repeatable
 - As many times as you like
- easier to monitor progress
 - less administrative work
 - can be more precise

E-learning tools: E-mail

- Every teacher should have an e-mail account
- Communicate with students
- Communicate with parents
- Students can submit assignment
- Can have attachments
- Create a paperless environment
- Simple but effective
- Efficient and cost effective

E-learning tools: Chat

- Communicate with students
- Communicate with parents
- More students participate
- Collaborative learning

E-learning tools: Online Forum

- A discussion forum
- Teacher can create discussion groups
- Teacher could post a question and request students to comment
- Students can post their comments
- Can encourage community participation
- Collaborative learning
- Feedback from diverse culture

E-learning tools: Video Conference

- Can conduct a live lecture
- Communication with students
- Communication with parents
- Support by audio, chat and whiteboard
- Support sharing of applications
- Can be recorded and later be used for on demand lectures
- Demo...

Tools: Learning Management System (LMS)

- Management of content
- Tracking students
- Administrative features
- Integration with various tools such as chat, forum, e-mail, etc.
- Reporting
- Demo... of Multimedia Learning System (MMLS)