



FUTURE OF UNIVERSITY AND UNIVERSITY OF THE FUTURE

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Overview

▣ **Future of University**

- Traditional Universities & Knowledge Acquisition Model
- Sustainable Future , Global Influence
- Worldwide student to double by 2025

▣ **University of the Future**

- Rethinking University to Prepare for an Uncertain Future
- The Vision -- Internationalizing Education
- Transforming HE in the 21st Century
- Challenges of Establishing World-Class Universities
- Digital Technologies, Global Mobility
- Imagining the Universities of the Future

Traditional Universities & the Knowledge Acquisition Model

▣ Traditional Components of a University:

- a. Faculty, b. students, & c. general supporting staff.

For generations, classroom instructors have stood in front of the blackboard, using standard style textbooks, & lecturing to their students.

In this environment, intellectual work is thought to be an act of knowledge transfer. The human mind is seen as a container & learning is seen as the pouring of knowledge into it & saving it.

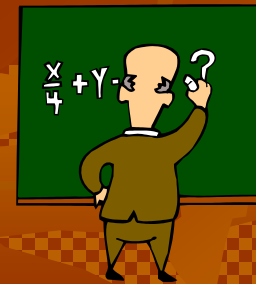
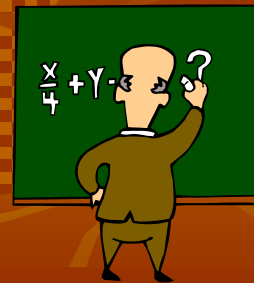
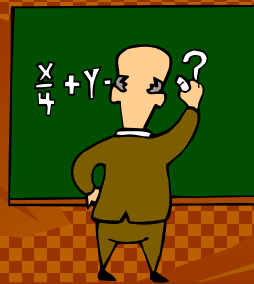
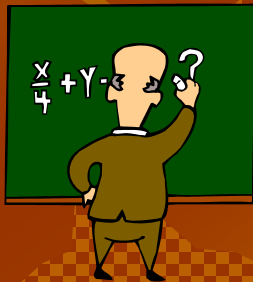
- ▣ Studying is considered as individual work. On the whole, teachers give importance only to the process of acquiring & saving information, & doing this effectively was the goal of education. Over the years, this has developed into the traditional style of university education.

Traditional Role of University



University
Administration

Academic
Departments



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Sustainable Future - Is It There ?

- Universities educate people who develop & manage society's institutions.
- Thus universities bear profound responsibilities to **increase the awareness, knowledge, technologies, & tools to create an environmentally sustainable future.**
- Universities have all the expertise necessary to develop the intellectual & conceptual framework to achieve this goal.
- Universities play a strong role in the education, research, policy development, information exchange, & community outreach to help create an equitable & sustainable future.

Sustainable Future (*contd.*)

- Resource depletion, poverty, & the need for substantial assistance from developed countries have put universities in a dilemma.
- The global credit crunch has led to widespread austerity budgets, causing cutbacks in resources & staff at many universities - particularly of developing countries, **but some are showing how to swim against the tide and expand.**
- Currently, HE sector will be under increasing pressure to justify its value & so will face more regulations & greater expectations to become self-sufficient.

Global Influence – Students to double to 262 m by 2025.

- HE students worldwide: forecast to more than double to 262 m by 2025. Nearly all this growth will be in the developing world, with more than half in China & India
- Students seeking study abroad could rise to 8 m.
- The developing countries experiencing a huge demand for HE will be unable to provide enough places (*Goddard*). So by 2025, 8 m students will have to travel to other countries to study – nearly three times more than today.
- Average annual growth in demand for international HE between 2005 & 2025 is expected to exceed 3% in Africa, the Middle East, Asia, Central America & South America.

Global Influence: International Students at US Colleges & Universities = 723,277

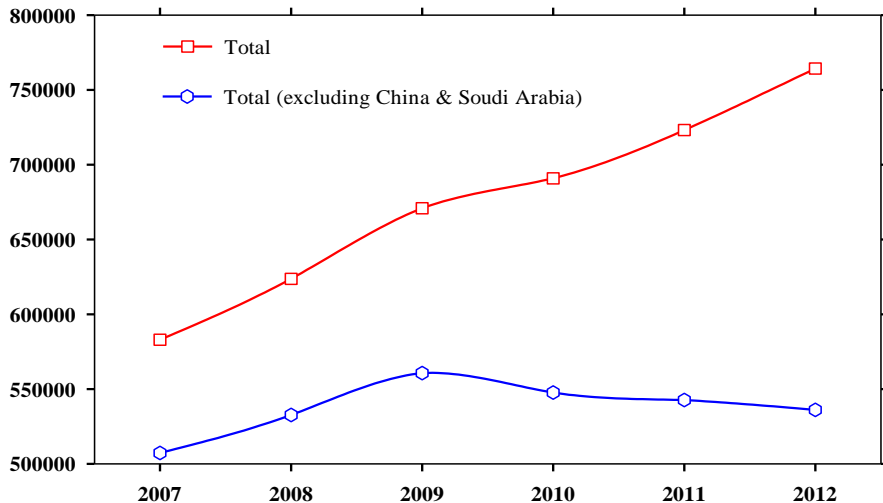
| Rank | Country | Number | % |
|------|----------|---------|-----|
| 1 | China | 158,000 | 22 |
| 2 | India | 104,000 | 15 |
| 3 | S. Korea | 74,000 | 10 |
| 4 | Canada | 28,000 | 4 |
| 5 | Taiwan | 25,000 | 4 |
| 6 | KSA | 23,000 | 3 |
| 7 | Japan | 21,000 | 3 |
| 8 | Vietnam | 15,000 | 2 |
| 9 | Mexico | 14,000 | 2 |
| 10 | Turkey | 12,000 | 1 |
| ... | | | |
| 24 | Pakistan | 5,045 | 0.7 |

The inability of developing countries to meet the medium-term demand for education is a key factor determining no. of students travelling to another country for education purposes.

Traditional source countries such as Singapore, Malaysia, Thailand & the Middle East are now developing their own capacities to offer education to outsiders.

Singapore hopes to attract 150,000 foreign students by 2015, Malaysia 100,000 by 2020 and Jordan 100,000 by the same year.

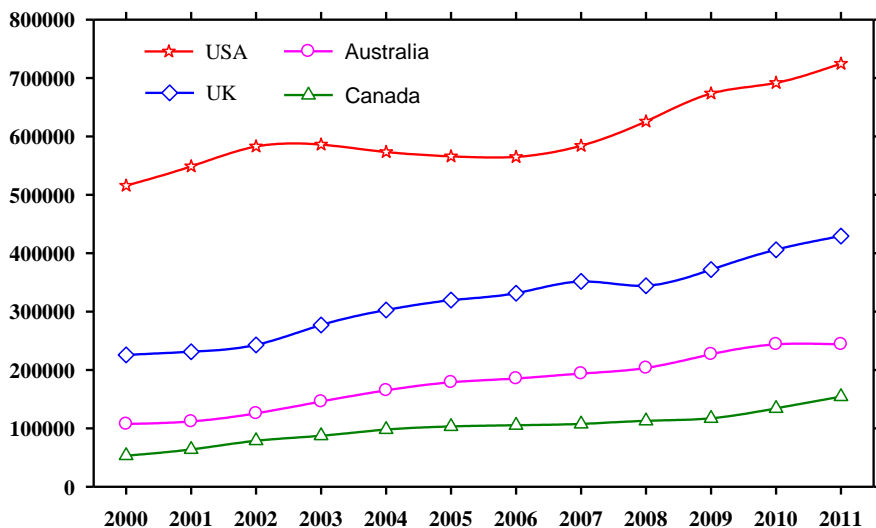
International Student Enrollment in the US (2007-2012)



Top 5 Majors for International Students

- 1 Business and Management
- 2 Engineering
- 3 Math and Computer Science
- 4 Physical and Life Sciences
- 5 Social Sciences

International Student Enrollment in Select Countries (Higher Education)



University of the Future

- The challenge developing nations face in the 21st century is to ensure access to quality HE for their citizens. This will not be easily achieved.
- Most developed nations have been building their HE systems for many decades and, in some cases, centuries.
- Now to catch up & become “**University of the Future**” the developing nations must do more than that – but in a much shorter period of time.

The developing nations need to set about building HE systems that can match those of developed nations, no matter how daunting the prospect.

- ▣ Frankly, this is a challenge that will prove too much for many nations.
- ▣ HE is extraordinarily expensive. The cost of providing buildings, libraries, support structures & staff (if they can be found) is testing the finances of even the richest nations.
- ▣ In many developed countries, the once publicly funded systems are now proving beyond the means of governments, & private sources of revenue have to be sought.

Rethinking University to Prepare for an Uncertain Future

- **With rapid change, the skills needed in the future are difficult to foretell.**
- **Experts throughout the world are debating & suggesting how they should design HE to meet an unknown future skills gap.**

University provides opportunities for students of all backgrounds to increase standards of living for themselves & future generations.

But, to succeed, university will need to forge new business models that are dynamic, modern & fit for the decades ahead.



What's on the cards for higher education in 2020 ?

The Vision -- Internationalizing Education

- ▣ Universities are no longer ranked nationally or regionally, they must compete on the international stage.
- ▣ It will never be easy, but It does not mean having to copy what developed nations have done. Indeed, it may be that this strategy would be wholly counterproductive.

New technologies are enabling new styles of learning that are better than the traditional classroom based method (**for Developed nations despite criticism**).

The vision is one of anytime, anywhere, on-any screen learning. (World Bank)

Transforming Higher Education in the 21st Century

University provides programs not only to meet the demands of a rapidly changing world but also to anticipate, and indeed, preempt future advances.

- ▣ The University focuses on applying new worldviews based on deep understanding of ICTs.
- ▣ The University's guiding principle is that of "openness", a philosophy reflected in its facilities, teaching styles & content, & research portfolio.

Challenge of Establishing World-Class Universities

- Since 2003 the first world ranking of universities by Shanghai Jiao Tong University (SJTU), the global race for prestige & international recognition has accelerated. National universities have become a source of pride or disappointment, depending on their standing in the SJTU ranking
- There is a widespread thirst for concrete guidelines on how to establish or develop universities that meet international standards for excellence.
- The *Times Higher Education World University Rankings* (since 2004) powered by Thomson Reuters are the only **global university performance tables** to judge world class universities across **core missions - teaching, research, knowledge transfer & international outlook** of their.
- The Top Universities rankings employ 13 carefully calibrated performance indicators to provide the most comprehensive & balanced comparisons available, which are trusted by students, academics, university leaders, industry & governments

▣ **Digital Technologies (DTs)**

DTs have transformed media, retail, entertainment & many other industries – higher education is next.

Campuses will remain, but DTs will transform the way education is delivered & accessed, & the way 'value' is created by HE providers, public & private alike.

▣ **Global mobility**

Global mobility will grow for students, academics, & university brands. This will not only intensify competition, but also create opportunities for much deeper global partnerships & broader access to student & academic talent.

e-learning

All computer & Internet-based activities that support teaching & learning - both on-campus and at a distance

Reach those not served by campus institutions (>75%)
open universities: only for print/broadcasting

ICTs: not universally accessible in Latin America, Asia (<25%), high cost

However, mix of campus/distance? Internet cafes, learning centres.

- ▣ **Criticism & Debate:** Segregation - no direct interaction !!

Imagining the Universities of Tomorrow

- There is no one destination or definition of the university of tomorrow – rather universities will have *multiple* futures & *multiple* identities. May benefit from a wide spectrum:
 - those that are primarily teaching institutions;
 - others that focus on vocational training; and a
 - limited no. that will be consequential research universities.

GAC members from Africa, Asia, Europe & North & South America – are united in the belief that **internet & mobile technology will be a “force multiplier”** – unharnessing the potential contributions of teachers far beyond the traditional classroom walls.



University of the Future

Imagining (*contd.*)

- The internet-based technology is fostering impressive pedagogical innovation, massively increasing access to university instructional materials & enabling growing numbers of students to pursue formal courses of study online.
- **Prominent example:**
Virtual University of Monterrey Tec (Mexico) has over 145,000 & awards degrees in 16 master's programs online & offers one internet-based Ph.D.



A student uses her computer at the Harvard University campus

Possible Porous geographic “boundaries” for a university

- ▣ Inevitably there may be porous geographic “boundaries” for a university.
- ▣ As just one example, a noted faculty member at Yale (USA) taught his course for credit last year from Beijing while conducting research. His “class” included students on the home Yale campus, but also students in Varanasi, India and Shanghai.
- ▣ Also, scope to develop HE system by avoiding huge investment of building new “bricks and mortar” facilities by **leap-frogging to online instruction**. This may be widely deployed across a country or farther.

Thank you



Thank you

OIC Countries' Efforts

▣ Proposed KPI for Quality assessment

The proposed KPI in OIC document builds on the efforts of fellow experts & policy makers carried out in Baku, Tehran, Damascus, Kuala Lumpur, & Riyadh.

Having been developed into a KPI document, it should contribute to the significant improvement of the quality of the OIC member states universities' programs and activities.

These KPI are profoundly based on the deep understanding of the nature of challenges & problems under which the universities of OIC member states operate.

These KPIs merge the international expectations & standards in HE performance together with OIC universities capabilities, resources, & expected challenges. They also respond carefully to OIC local communities' needs & foresee their hoped future.

OIC Countries' Efforts So Far:

Strategy for Science, Technology and Innovation for the Islamic World:

- **2003** (Putrajaya, Malaysia): Strategy adopted by the 10th Session of the Islamic Summit.
- **2005** (December, Makkah-al-Mukaramah, 3rd Extraordinary Islamic Summit): Adopted the OIC ten-year Program of Action that calls for effective improvement & reformulation of the educational institutions & curricula at all levels in the OIC member states. A mechanism to meet & achieve the decision is to encourage the universities to improve their standards of quality, especially the universities with potential to become world class universities to the *rank of Top 500 World Universities*.
- **2006** (20 Nov, Kuwait City): Informal open-ended meeting of the Ministers of HE - discussed procedures & mechanisms of improvement of universities' performance; Tech. Expert Committee is formed that would urge the Member States to strive for quality education that promotes creativity, innovation & R&D.
- **2007** (19-21 February, Teheran): A Tech. Expert Committee drafted a document containing proposed criteria, procedures & mechanisms for ranking of universities in the OIC region.
- **2007** (29-30 April, Teheran): The draft was distributed to all member states.

OIC's Efforts (contd.):

- **2008 (Oct., 4th Islamic Conf. of the Ministers of HE & Scientific Res., Baku, Republic of Azerbaijan):** Strategy is updated; stressed the importance of sustained & enduring investment in capital development representing the knowledge, potential, drive, skills & all other essential attributes. It also highlighted the Islamic perspective on education.
- The amended draft document was placed at this meeting after the Representatives of OIC member states reviewed the draft document with the aim of seeking consensus on the proposed criteria. The conference recommended further examination of the subject and document
- **2009 (May, 37th Council of Foreign Ministers of the OIC member states, Damascus):** OIC General Secretariat is requested to convene an extraordinary meeting of the Ministers of HE & Scientific Res., in collaboration with ISESCO, to receive the feedbacks with the purpose of preparing a document as a basis for future decision & implementation.

OIC Countries' Efforts

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FIWU's effort:

- The objectives enshrined in the Charter of the Federation of the Universities of the Islamic World, Article (4)b, call for upgrading and developing higher education to meet the Islamic countries' requirements & needs in terms of human resources,
- Pursuant to the recommendations of the Third General Conference of the Federation of the Universities of the Islamic World (held in the University of Sharjah, United Arab Emirates, 9-11/03/2004), inviting the Federation's Secretary General to “devise specialized projects to develop higher education in the Islamic world”,
- In response to the Resolutions of the 2nd Islamic Conf. of the Ministers of HE & Scientific Res., held in Tripoli (Libya, 6-9/09/2003), which called for energizing the role of HE & scientific research institutions in developing the society, improving the performance of the educational system, upgrading the quality of educational institutions & developing the skills of their human resources,
- Based on the awareness of the Federation's General Secretariat about the growing educational & learning needs as well as the increasing internal & external challenges in Islamic countries,
- The General Secretariat, drawing on its accumulated expertise and relying on the experiences and references of educational institutions concerned with university education, has drawn up the Draft “Strategy on the Promotion of University Education in the Islamic World”, with a view to stepping up the efforts exerted by HE institutions in the OIC Member States, & in appreciation of the mission of education aiming at edifying the personality of the Muslim, enhancing the integrity of the society, protecting its cultural identity & keeping abreast of universal achievements in the different knowledge subjects.