OBE In Polytechnic Education
THE JOURNEY…..

- **WHAT**
  - 4 OBE Principles
  - 3 OBE Elements – CIA

- **SO WHAT**
  - 21\textsuperscript{st} century
  - Transformasi Poly

- **NOW WHAT**
  - Constructive Allignment (CA)
  - Systemic CA
    - Alligning PLO-CLO
    - Alligning CIA
  - Poly Roadmap????
WHAT?
A review of education system

- education system adequately prepare students for 21st century life and work?

- Is Traditional Education (TE) adequate?
HE Sector-wide movement from traditional education (TE) to OBE

**Pre-2004**

**INput Measure**

**Content base**
  - taught, examined

**Teacher-centered**

**Norm-referenced**

**Marks, Grades**

**Transcripts**
**TE deficiencies**

- Graduates are not completely prepared for the workforce.

- Lack of emphasis on soft skills needed in jobs e.g. communication, thinking, self-management, human relationships, English proficiency, ...
Birth of OBE

- In 1989, 5 countries signed the Washington Accord. They are: Australia, New Zealand, the UK, Canada, Ireland & the USA.
- Other full signatories are Hong Kong (1995), South Africa (1999), Japan (2005), Singapore (2006), Taiwan (2007), Korea (2007).
- Provisional members include Malaysia, Germany, India, Russia and Sri Lanka.
The Washington Accord

- The Accord recognises the substantial equivalency of accreditation systems of member states, & graduates from member states may work in other member states.
- The Public Service Department (PSD), Board of Engineers Malaysia (BEM), Malaysian Qualifications Agency (MQA) & Institute of Engineers (IEM) together form the Engineering Accreditation Council (EAC).
- EAC signed for Malaysia.
WHAT is OBE?

A method of curriculum design and teaching that focuses on what students can actually do after they are taught.
OBE asks

- What do you want the students to learn?
- Why do you want them to learn it?
- How can you best help students to learn it?
- How will you know what they have learnt it?
OBE vs TE

- OBE’s instructional planning process is a reverse of that associated with TE planning.
- The desired outcome is selected first and the curriculum, instructional materials and assessments are created to support the intended outcome.
- All educational decisions are made based on how best to facilitate the desired outcomes.
4 OBE Principles ...

1. Clarity of Focus
   outcomes as the focus; made known to students

2. Designing Down
   1\textsuperscript{st} OUTCOME, then C...I....A...designed, alligned

3. High Expectations
   high standard of performance or all

4. Expanded Opportunities
   opportunities for all to achieve outcome
3 OBE elements.....CIA

1. **Curriculum**

[Intended Learning Outcomes (ILO) ]

WHY teach?
WHAT **students** should know, do, be after learning?
NOT A list of topics to be covered!!!
Instruction or Teaching

WHAT learning activities should the students to engage in order for them to best achieve the ILOs?
3. Assessment

WHAT assessment tasks (tests, assignments) would really tell us how well **students** have **achieved** the **ILOs**?
SO WHAT?
WHY OBE in Poly?

- QUALITY and ACCOUNTABILITY in education

- OUTCOME -- the new education effectiveness currency
  - HE Sector-wide movement from TE to OBE
  - MQA requirement is based on OBE philosophy
WHY OBE? ....Transformasi Poly

OBJEKTIF

“.....menghasilkan graduat berkualiti yang berdaya usahawan (enterprising), berkebolehpasaran tinggi dan berdaya saing”

JPP 2009: 14

HASIL ke2 (2105)

“Employable/entrepreneurial graduates “

Ibid:37

KPI 2 (2020)

85% graduat politeknik mendapat pekerjaan (termasuk melanjut pelajaran)

ibid:70
The need to implement OBE

Undergraduate curriculum needs to be transformed into OBE in accordance with requirements from:

1. Engineering Accreditation Council (EAC), Malaysia
2. Malaysian Qualification Framework (MQF) introduced by the Ministry of Higher Education (MOHE), Malaysia
NOW WHAT?
Graduan

- Mentaliti Kelas Pertama
- Visi JPP: Menjana modal insan inovatif melalui pendidikan dan latihan transformational bagi memenuhi keperluan tenaga global menjelang 2015
- memiliki 7 Generic Skill Attributes (GSA)
- Menjayakan Model Ekonomi Baharu berteraskan inovasi dan kreativiti
What are expected of students under OBE?

- Students are expected to be able to do more challenging tasks other than memorise and reproduce what was taught.

- Students should be able to: write project proposals, complete projects, analyse case studies, give case presentations, show their abilities to think, question, research, and make decisions based on the findings.
OBE expectations (cont.)

- Students are also expected to be creative, able to analyse and synthesise information, able to plan and organise tasks, able to work in a team as a community or in entrepreneurial service teams to propose solutions to problems and market their solutions.
Assessments in OBE

- The learning outcomes are set out sequentially on a gradation of increasing complexity that students are expected to master.
- OBE focuses on how much and how well the students have learnt.
  Weaker students may have to follow a different learning path & finish later.
Constructive – students construct meaning through relevant learning activities

Alignment – educators design TLAs and ATs that are aligned to the ILOs. Best achieved by designing TLAs and ATs that activate the same ILO verbs.
Alligning PEOs PLOs, CLOs

GLO/Institutional LO/Programme Educational Objectives (PEO) address society demand? GAPs?

Program Learning Outcomes (PLOs) address PEOs/GLO/Institutional LOs? GAPs?

Course Learning Outcomes (CLOs) address PLOs? GAPs?
PEO, PLO

- **PLO** are outcomes the students should have achieved by graduation time.
- **PEO** are objectives that have to be achieved by a graduate several years after graduation.

  Has mastery of knowledge and skills needed to be an effective and efficient technician.

  Has professional attitude and ethics in fulfilling his role.

  Capable of adapting to the global work environment.

  Capable of providing leadership in the organisation he works in.
Alligning CIA

Curriculum
What the student has to learn: troubleshoot

Instruction
Engaging the student in the LO verb troubleshoot

Assessment
How well the student has met the LO troubleshoot
“HE Sector-wide movement from traditional education (TE) to OBE“

**TE**  
OUTcome Measure  
Outcome driven  
Student-centered  
PBL, WBL, Case study, Projects, CL, internships, presentations, e-learning, mobile learning, OVDL

**OBE**  
Standard-referenced  
Portfolios, Journals, Rubrics
“....if applied consistently, systematically, creatively and simultaneously would ensure that all students were equipped with the knowledge, competence and qualities necessary for successful fulfilment of their various life roles”

Khodori (2010):2
Systemic Implementation of CA

TP(A)/TP(SA)/GLO/ILO
PLO/CLO
QA
Policy & Procedure
Unit Q

TP(A)/KJ
Program Design
& Management
ULPL/UMS/UICT

/KJ/KP/lecturers
TLAs
ATs
Reflective Practice
ULPL/R&D/UBK/UMS/UICT/UKK
Awareness

Capacity Building

PUO (2)
POLIMAS (2)

PKB (1)
POLISAS (1)

PMM (1)
PSA (1)

Pelajar
The Approach....
OBE & Quality Management

- OBE is implemented to ensure that our academic programmes, delivery system, assessment methods and our graduates are of high quality.
- The paradigm shift to OBE is driven by the Quality Assurance Department at the Ministry of Higher Education, Malaysia currently known as Malaysia Quality Agency (MQA).
CIDOS E-LEARNING
Resources


Demoken, Suleyman. Developing the Preferred Graduates: Our Experience at HK PolyU, Fifth QS Asia Pacific Professional Leaders In Education Conference And Exhibition on November 24, 2009.


General Descriptions of CA
- http://senate.gla.ac.uk/academic/assessment/index.html
- www.engsc.ac.uk/er/theory/constructivealignment.asp
- CELT at HKULST

OBE Institutional Practices
- University of Glasco
- Hong Kong Polytechnic University
- http://www.cdtl.nus.edu.sg