CHALLENGES AND OPPORTUNITIES FOR MEASURING LEARNING OUTCOMES OF HIGHER EDUCATION IN ASIA-PACIFIC
AGENDA

- Overview
- Some pressing issues
- Challenges and opportunities
- Why such constructive alignment imperative to assess learning outcomes
- Moving forward
- Concluding remarks
- Some useful sources of information
Learning outcomes – one important descriptor of national qualifications frameworks (NQFs)

As of 2015, 140 countries have developed NQFs, with 6 regional frameworks (UNESCO, 2015)

Some countries have comprehensive frameworks – basic education, technical vocational education and training, labour based and higher education), whilst others are limited in scope and/or with diverse ownership

Some countries have sectorial or institutional learning outcomes – Canada, China, Germany, Russia, U.S. (Coates, 2014) and Malaysia; graduate attributes in Australia

Diverse practices in higher education compared to schools – more autonomy with different types of ownership, disciplines, modes of delivery, accountability to wider group of stakeholders

Several key issues concerning learning outcomes to be addressed, driven either by long term trends of emerging concerns
SOME PRESSING ISSUES

- **Mobility** - **comparability** and **recognition** of qualifications
- Linking learning outcomes to the **world of work** and **holistic development of human beings**
- Emergence of:
  - Private **higher education institutions**; cross-border **higher education** (competition and market being the key driver)
  - **Subject-specific accreditors** beyond national agencies (too many cooks in the kitchen)
  - **discipline/sectorial-based** programme standards/learning outcomes
  - **multiple modes of learning** – online, ODL, blended, MOOCs, nano-qualifications, badges, OERs, work-based learning (2u2i) etc.
  - **Lifelong learning** - pursuing qualifications through **recognition of prior learning**
  - Shifting of **accountability** – from governments to EQAAs; from EQAAs to IQAAs; from academics to industry and vice-versa
• **Measurement of achievement** of learning outcomes vs graduation output
  - Have you heard of students passing but **DID NOT** achieve all the stated learning outcomes?
  - Many people do not have a comprehensive understanding of what ‘learning outcomes’ is, let alone ‘the outcome-based education’ approach!
  - I am a Professor top in my field, and I know best how to measure learning outcomes of my students. Are you telling me my approach is wrong? Are you teaching me what to do instead?
Regional-level

- Harmonisation through a common reference point (regional reference framework for Asia Pacific countries), one which celebrates diversities, market-based and innovation-enabled?
  Unifying tertiary, TVET and professional programmes? Our lifetime?
- AP-‘NIC’? AP-CTS? AP-Passport?
- Coordinating the development of sectorial- or discipline-based learning outcomes? Education? Entrepreneurship?
  How about other disciplines?
- Coordinating the development of measurement toolkit for learning outcomes, i.e. OECD’s AHELO?
Country-level

- Development of sectorial- or discipline-based programme standards/learning outcomes?
- Development of standards on recognition of prior learning and modes of delivery? ODL? MOOCs?
- Feasibility of assessment such as the use of criterion-based assessments as performance indicators to measure achievement of learning outcomes, i.e. iCGPA?
- Comparability of learning outcomes based on level of programmes within and across institutions?
- Capacity building, i.e. vocabulary used? Strengthening EQAA?
- Funding?
- Research & development to strengthen EQAAs and identify best practices?
iCGPA
(Integrated Cumulative Grade Point Average)
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Institutional-level

- Appoint Chief Learning Architect?
- Development of graduate attributes and/or institutional-based learning outcomes?
- Comparability of level of programmes across faculties?
- Aligning institutional-, discipline-, programme- and subject-based learning outcomes to instructional and assessment strategies via constructive alignment?
- Measurement of attainment of programme/discipline-based learning outcomes?
- Policy on faculty evaluation and incentives? Central services on training and development in instructional, assessment strategies and general education skills and competencies? ICT?
- Adequate financial/support facilities, including resources, co-curriculum, student support services, teaching staff?
- Robust IQA mechanisms, including benchmarking, measurement, documentation and reporting?
Discipline-specific level

- Adherence to discipline-based standards?
- Continuous quality improvements through periodic programme evaluation and auditing?
  - What do we do with assessment results?
- Identification of champions/subject matter experts and ongoing conversation between them and other stakeholders?
- Shared vision and process ownership?
- Development of discipline-based assessments, i.e. Australian Medical Assessment Collaboration?
Students

- **Clearer information** about expectations in terms of learning outcomes when being told from the offset

- **Improved learning experiences** throughout journey – industry/internationally competitive

- **Greater engagement in studies** because of explicit identification of both cognitive and affective learning outcomes they are expected to achieve

- Receive **statements of attainment** that would state in greater detail what they know and can do instead of just list of courses and grades
Teaching Staff and Supervisors

- **Continual improvement of instructional approaches** through better clarity of the learning outcomes to be achieved
- **Better alignment** with the curriculum and assessment methods used
- **Greater sense of engagement** due to the need to work with colleagues across disciplines as well as their own
- **Continuous monitoring and assisting students** to become more competitive in their achievements
- **Assessment of prospective students’ capabilities** for postgraduate programmes by research mode
- **Match research topics** based on students’ competencies
Educational Institutions and Programme Management

- Assessment of prospective students’ competencies at entry level
- Evaluation to consider potential credit transfers or exemptions
- Continual monitoring of the effectiveness of institutional ecosystem’s contributions towards students’ holistic development
- Holistic improvement of institutional ecosystem in developing holistic students and employable graduates
- Continual monitoring on the effectiveness and impact of curriculum design and delivery
- Intervention programme for students to achieve optimal performance
Employers

- Holistic screening and assessment for job applications
- Compare knowledge and skills of graduates from a range of institutions more easily
- Allow further development of competencies necessary at the workplace
WHY IS SUCH ALIGNMENT IMPERATIVE?

Government and Funding Agencies

- Ensure graduates meet the nation’s educational aspirations
- Ensure institutional accountability for funding of teaching and learning outcomes
- Monitor performance of sponsored students
- Funding on outcomes rather than input or output
- Incentivise institutions to improve their quality of teaching and learning
- Information for future design of policies and plans of actions
Moving Forward

- **Build trust** for information and cooperation
- **Overcoming resistance** to century-old practices and belief on the autonomous nature of academics (academic freedom)
- **Conformity and reduced diversity of assessment forms** – in contrast to innovation – use of signature assessments plus other tasks to provoke soft skills
- A small number of grading and broad statements of attainment linked to institutional performance – *gaming* the system
- **Investment costs**, taking into account standards of multiple accreditors
- **Ranking of institutions** – competition-driven; ranking and accreditation - two roads to the same goal?
- Behaviour and learning attitudes of **millennials**, class sizes
• **Sustaining** the outcome-based practice/processes – industry
  • Keep learning outcomes **simple, sustainable and sufficient**
  • Changing from **information to improvement**

• Learning outcomes are only meaningful if they are measurable which provides the means to develop a comprehensive assessment of **academic quality, institutional integrity and effectiveness**, a path to continuous improvement

• Learning outcomes can **COMBAT academic corruption** in some ways, i.e. degree mills

• **Educating and getting buy-in** from different stakeholders are imperative to meet the Education 2030 Framework for Action Target 4.3, ‘by 2030, ensure equal access for all women and men for affordable and **quality** technical, vocational and tertiary education, including university’.
Sources of useful information:

- Assessment Transparency Model
- Assessment of Higher Education Learning Outcomes (AHELO)
- Australian Medical Assessment Collaboration
- Degree Qualifications Profile
- Higher Education Quality Council of Ontario
- iCGPA, Malaysian Ministry of Higher Education
- Liberal Education and America’s Promise (LEAP)
- Malaysian Qualifications Agency’s Programme Standards
- OBE – Assessing and Assuring Graduate Learning Outcomes (AAGLO)
- Tuning process
- Valid Assessment of Learning in Undergraduate Education (VALUE) by the American Association of Colleges and Universities
ANY QUESTION?
“Would you tell me, please, which way I ought to go from here?” “That depends a good deal on where you want to get to,” said the Cat. “I don’t much care where –” said Alice. “Then it doesn’t matter which way you go,” said the Cat. “– so long as I get somewhere,” Alice added as an explanation. “Oh, you’re sure to do that,” said the Cat, “if you only walk long enough.” ~

Lewis Carroll’s 1865 novel, Alice’s Adventures in Wonderland