

Unlocking Current Potential of Malaysian Universities Towards Research Performance

Erasmus+ Capacity Building in Higher Education
Assessing and Improving Research Performance at South East Asian Universities

Azlina Hanif
AAGBS, UiTM

Nor Aiza Mohd-Zamil
Universiti UTM IBS



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Introduction

- Positive research achievement shown by Malaysian academicians (quantitatively) but little has been discussed in terms of the impact of the research activities.
- Thus, the general objective of the paper is to discuss the current potential of Malaysian universities towards research performance.

Present experience in Flourishing Research Culture and their Outcomes in HEIs Malaysia

- To be a developed nation by 2020, Malaysia places emphasis on R&D (not only amongst businesses but also **universities**)
 - Strategies:
 1. Named 5 universities as RUs since 2007
 - UM, UKM, UPM, USM, UTM)
 2. Provision of research grants
 3. Commercialization of research findings
 - **Results** (Rahman, 23 Dec 2016):
 1. International collaboration with 179 countries
 2. Co-authored 27,891 articles in indexed journals
- * Highest collaboration with Australian and British researchers; highest citation impact scores with researchers from Sweden and Brazil

Various Current Research Performance of HEIs

- Number of research output and quality grew significantly (2005-2012): articles increased 3x, citations increased 4x, patents increased 11%, income generated = RM1.25Billion
- Rankings of unis improved
- Papers (scopus and thomson-reuters) increased – UM led the pack
- More recent statistics (as of 2014): UiTM fastest growing number of authors, large unis grew faster than smaller ones, Nottingham and Monash unis (private) and UM and UKM (public) leading, 47,000 articles (elsevier)
- Overall:
 - growth of research output increased over 594%
 - RUs contributed over 70% publication
 - collaboration and consultation (with industry, NGOs) RM1.3Billion
 - Public unis brought in RM7.17B revenue (28.5% return of research investment from R&D grant allocation)

Expectations of MOHE

- Promote a stronger academia-industry partnership
- MOHE modeled innovation ecosystem as one of the 10 Shifts in Malaysia's Education Blueprint (2015 – 2025)
- Includes research areas critical to eco growth and university, demand-driven research, development and commercialization models
- Research findings should be impactful and meaningful to the society and elevate their living standards and general well-being

Issues

- Mismatch between the amount of resources allocated towards research and the outcome
- Reduced funding for public universities under the Budget 2017 - cutbacks have made it difficult to secure government research grants
- Low morale of academicians due to the pressure from the rigor of the research performance assessment

Issues

- The annual performance - criteria for salary increment but also academic promotion.
- Ismail et. al (2017), found the main issues of commercialization - funding, manpower, marketing strategies, readiness of industry to use products innovated by unis, expensive IPRs system, lack of technical and management skills

Challenges

- Budgetary constraint
- Pressure to publish or perish – affect quality of research work produced
- Balance between teaching & learning and research performance
- Lasting and meaningful collaboration between academia-industry in R&D&C (principal-agent problem)
- Basic Infrastructure and infrastructure for research activities
- Efficient and effective management of research activities and disbursement of grants

Assessment of Research Performance: MyRA

- MOHE developed MyRA to assess R&D&C yearly activities
- Universities will self assess their research performance
- MOHE can gather data from each uni and evaluate their performance – can nurture R&D&C activities and human capital
- Based on MyRA scores for 2014/2015, 5 RUs and UTP obtained 6* Rating

Factors Affecting Research Performance

- Collaboration and network
- Research performance improvements apparently do not depend directly on the competition for funding and steering policy
- Proficiency in English
- Ability to publish in international, reputable journal
- Individual characteristics of individual researcher
- Government's policy direction

Conclusion

- Academia-industry-gov linkage is very important for research sustainability (win-win situation)
- Competition amongst universities – upside: continuous efforts to improve research performance; downside: compromise of quality over quantity
- We find Malaysian unis (esp RUs) have made good progress in research and publication, despite the issues and challenges. But more commercialization effort is required.
- To unlock current potential: Need more readiness and acceptance of the industry to advance the R&D&C activities; Unis to aim for LT research that are impactful
- What is required? Supportive environment of the performance measurement and rating systems, quality equally important with quantity

Thank you for your attention!