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Re-skilling vocational education and training practitioners in Indonesia

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Abstract. Globalisation, together with the escalating levels of internationalisation of education, is placing emerging and unfamiliar pressures on the Indonesia vocational education and training system. Increasingly, Indonesia, like many other ASEAN nations, is being challenged by the growth of employee mobility and currently, their educational institutions struggle to provide the human resource development frameworks to build a modern skilled and efficient workforce. Recognising this need to meet these urgent demands for a modern skilled and trained workforce, the Indonesian government has focused on the introduction of advanced technical and vocational education through a ‘Revitalisation Program for Vocational Higher Education Institutions’. This program is designed to improve the relevance, engagement and understanding between vocational and higher education institutions with business and industry, but it often calls on international educational support. In this paper, we examine the implications of importing ‘external knowhow’ into the Indonesian vocational education and training sector, placing particular focus on culturally appropriate training models, the growing reliance on ‘external’ models of engagement, and the implications for appropriate and sustainable vocational training models. Central to this re-skilling of the vocational education and training sector, are programs that: address the human resource capability development of the educator workforce; build viable and sustainable links to industry in order to provide seamless workforce needs; explore and examine models for successful industry development; and nurture mutually beneficial ‘strategic partnerships’ both locally and internationally.

1. Introduction

1.1. Globalisation and its implications for vocational education and training interventions

Globalisation, in conjunction with escalating levels of internationalisation of education, is placing emerging and unfamiliar pressures on the Indonesian Training and Further Education (FE) system. According to Sevrani and Gorica [1], globalisation is ‘an inevitable and irreversible process’ and as such recommend that in dealing with globalisation, the development of a FE within emerging jurisdictions needs to acknowledge the inevitable positive aspects of the change, and diminish the negative ones. Marques et al. [2] provide a clear and positive analysis of globalisation, suggesting it brings greater trade benefits along with efficiencies, cost reductions and economic integration. Additionally, Anderson [3] opines that globalisation can, if treated with intention, assist in the creation of borderless marketplaces



and subsequently increase the diversification of services and products, through the manifestation of the export opportunities. Globalisation, has in essence accelerated the reformation of industry, its pervasiveness, and is particularly seen with respect to Vocational Education and Training (VET) reform across the ASEAN nation states. In this respect, Indonesia, like many other ASEAN nations, is being seriously challenged by commitments towards greater employee mobility, but currently, their educational institutions lack the ability to provide the human resource development frameworks to provide an appropriately skilled and efficient workforce.

VET reform focuses on industry-led training interventions, curriculum reform and a close alignment to the stated needs of industry. Reforms are increasingly becoming more aligned with industry requirements and are driven by emerging markets. They include greater focus being placed on new technologies and the removal of out-dated curricula. Furthermore, reform fundamentally requires replacing outmoded equipment and teaching/learning materials with state of the art material [4]. In some countries, this VET reform plays a valuable role in stimulating and facilitating economic expansion, as these countries respond to the demands of globalisation [5]. Volkoff and Perry [6] also contend that parallel globalisation and technological reforms create the need for urgent structural changes around skill development. These changes need to act in concert with rapidly changing social, environment and economic needs, emerging within developing countries, like Indonesia. Globalisation has served as a valuable enabler for these countries, including Indonesia, allowing them to exponentially expand global business and trading relationships, as well as begin to build new mutually beneficial strategic partnerships between FE and training providers and industry locally and internationally [7]. It is against this apparently advantageous background, that this paper tentatively argues that these ‘strategic partnerships’ need to be more closely examined, since ‘mutual benefit’ is a subtle and nuanced concept.

These partnerships involve a somewhat intricate array of outcomes and challenges. There is an increasing degree of ‘mobilisation’, interconnectedness and interdependence in, and among, ASEAN nation states and individuals, resulting from the opening of regional borders [8]. In addition, there is the concomitant problem of how to better understand issues around human connectivity and mobility which will be needed to maintain and enhance a social milieu which is increasing in size and complexity. Partnerships also provide opportunities for ASEAN nation state governments to more confidently influence the mobility and skills development programs required to respond to these mobilisation requirements. Indeed, Marginson [9] observes that the flow of global capital and greater financial interconnectedness can consume markets, yet training, and moreover education systems, remain areas where governments can still exercise sovereign power.

1.2. The emergence of some hidden problems in imported development assistance

However, notwithstanding the positive effects of globalisation, it is of concern to us that there are some relatively hidden issues which we feel need to be at least acknowledged. Anderson [3] believes globalisation can potentially erode traditional controls within countries, especially when they accept international development assistance. Therefore, greater awareness is needed around these hidden issues, and this paper consequently cautions against the unbridled wholesale acceptance of imported models as they may result in unexpected and unhelpful long-term outcomes. In the majority of recent Vocational Education and Training (VET) initiatives, external aid donors deploy western expertise as they search for western solutions, often using western technologies and means to achieve western perceptions as to improvement in practices. These approaches are invariably undertaken through the sourcing of western expertise, which in reality only serves as self-perpetuating cycle of western-centric development. Recipient countries, however are becoming more perceptive in recognising this cycle, and it has been suggested that this lack of apparent relevance and input to indigenous systems and personnel, needs reforming [10].

It has been specifically commented that an understanding of the Indonesian context and the application of appropriate and responsive vocational training interventions to deal with their particular needs, is critical to the long-term and culturally apposite success of international assistance [11]. As a result, new development thinking is emerging, as local industry partners look to engage, or at least request

involvement from, locally experienced qualified trainers and educators. This thinking, we believe, will assist in closing the gap and play a valuable role in improving the potential provision of sustainable long-term solutions. Indeed, future sustainable development outcomes hinge on building local human capability and capacity, so that ongoing benefits can be realised within Indonesia. Empowering local communities, to become active participants in developing culturally relevant training and education outcomes and building local human capability, may actually provide the most advantageous ongoing benefits for the recipient community, and give the most return from the international aid response [12].

1.3. The economic and practical context of international vocational education training

In response to the need to become ‘internationally competitive’ and build national comparative advantage, ASEAN governments have increasingly relied on bolstering human capability development initiatives. Ensuring workforce competitiveness in a globalised economy is becoming a major facet of government efforts, especially as they strive for greater sustainability. Major funding agencies like the Asian Development Bank (ADB), World Bank, United Nations’ Educational, Scientific and Cultural Organization (UNESCO) and other state-based funding bodies have, for this reason, paid particular attention in developing countries to researching, and moreover supporting the establishment of VET [6]. International assistance by these donor agencies has unarguably supported improvements in ASEAN VET programs, and viewed from the ASEAN perspective, further significant investments are needed in physical and human resources for developing the sector such as; upgrading facilities, introducing new technologies, and reforming human resource capacity in the interest of serving the growing requirements of regionalisation and internationalisation [4]. However, the process of accepting international support from international donors such as the ADB, World Bank, UNICEF and others to achieve these improvements, has seen these external agencies significantly influence the recipient government’s policies and strategies [13].

It has already been noted that international donor agencies have transplanted international VET policies applicable in first world countries into the recipient country, and this action may have an intended or unintended effect of ‘colonising’ the VET systems of developing nations [14]. This form of ‘colonisation’ can be illustrated by: (a) the required international donor-led agendas as part of ‘conditionality’, (b) conditions being applied to the receipt of international assistance [12], (c) international assistance requiring dependence upon imported technical assistance [15], and (d) the requirement of international assistance to foreground concepts such as the incorporation of andragogy, increased inclusiveness, especially around gender equality and governance as well as the implementation of VET systems that become more demand driven [16]. It is noted that these characteristics being implemented in Indonesia are identifiable in many other national VET systems [17].

2. Methods

2.1 Design and methodological approach

The methodological approach for this research included individual and group interviews with participants regarding international placements, and surveying previous participants on their experiences of study programs abroad. The research sought to answer the questions: What impact did the overseas placement have on the participants conduct of vocational training? and (ii) What improvements to the international placement will enhance the delivery of the reskilling program?

In attempting to answer these questions, the study considered re-skilling through the lens of existing approaches to educator capacity building, which currently focuses on overseas training and development programs. The research hopes to reveal any underlying challenges and or impediments that may hamper capacity building within Indonesia, through the examination of impacts that result from being overly reliant on international advisors [12]; an inability to incorporate and further develop local capability [18]; and the deficits around local skills transference [19]. The researchers also believe that many unexplored issues that could potential arise and thus impact on Indonesian’s ongoing human resource development by accepting unconditionally internationally sourced donor funding, particularly around facilitating the

transference of politically donor-led motivated economic agendas, and subsequently implementation of their operational policies [12], along with an overreliance on technical assistance and the behest of building local talent [15].

3. Results

3.1 VET and human capital development – ‘re-skilling’

Hagen [20] suggest that national policies are increasingly responding to the growing competitive demands of globalisation and consequently allowable mixes of expertise and quality to facilitate the management of knowledge and development of local expertise. In this respect, Marginson [21] argues that Human Capital Theory, and its widespread application globally, is impacting on training and education interventions, along with the local construction of educational frameworks. Human Capital Theory, according to Marginson [21], has changed thinking around VET learners, by reframing the discussion around the human economic asset, which in turn form a valuable component of production, and as a result largely replaces the previous social and educational roles of vocational training. Powles and Anderson [22] suggest that through the lens of Human Capital Theory, training and education emerge as more focused, serving to boost economic productivity and a country’s comparative competitiveness.

Global economic expansion, along with volatility in international labour markets, requires the constant reorganising of national economic structures and hyper vigilance as the changes impact and interplay with resultant employment outcomes. These constant adjustment and movements can impact dramatically on education and training, especially when they serve to weaken institutional frameworks and a government’s ability to adequately forecast human capital requirements and thus plan for the longer-term labour force development needs [23]. Recognising the need to meet these urgent demands for a modern skilled and trained workforce, the Indonesian government has focused on the introduction of the up-skilling of technical and further education trainers and teachers through a ‘Revitalisation Program for Vocational Higher Education Institutions’. This re-skilling program is designed to improve the relevance, engagement and understanding between vocational higher vocational education institutions with business and industry, often calling on international educational support.

The re-skilling program, acknowledged as one of Indonesia’s national priority programs, was a combination of recognising and certifying competence training and apprenticeships in educational institutions or industry partners, in accordance with the competences which are required and expected in industry, both in Indonesia and abroad. In addition, the program conducted internships in educational institutions and industry placements in compatible industry sectors for Indonesian vocational trainers. The expected goals of this re-skilling program were to; improve lecturers of vocational higher education institution’s quality and capability, associated with capacity to deliver vocational education programs; enhance the competitiveness of the alumni of vocational higher education in relation to competing for jobs globally; and create a competitive and innovative environment. This program sends VET teachers and trainers abroad to gain ‘experience’ in implementing industry responsive training systems. Responses from participants in this program indicate that this program has had a mixed success.

3.2. Challenges in the re-skilling program

A number of challenges emerged from the deployment and implementation of the Indonesian Re-skilling program; these included:

- a) The choice of industry-related competency requirements and the selected international provider were at times incongruent. The implementation of the international training differed significantly to the expectations of the participants and those of the Ministry of Education and Culture.
- b) The training content was dominated by didactic and methodical training, while the core competencies required were given less attention.
- c) The international training providers were required to adopt and adapt the training program to suit the needs of an Indonesian learner. This expectation was deployed with limited success, as the programs often lacked the cultural nuance to cater for people with different learning styles.

- d) The participants were so overwhelmed by the amount of ‘content’ from the many international providers, that it was difficult for the participants to discern the relevance of much of the information. This was described by some as ‘content clutter’. In addition, the data on the labour market and on the relevance of TVET systems for industry were inadequate.

4. Discussion

4.1. *The challenges for vocational education and training*

Traditionally, Asian countries value education highly, particularly higher or academic education, but vocational education is, in contrast, usually held in low regard [10]. Most countries’ education policies focus on academic careers, and not so much on practice-oriented training for modern jobs. Thus, in many environments, vocational education has a poor image, is not integrated into the education system, and is severely underfinanced [24].

Looking at the challenges that consequently emerged from this programmatic involvement of international vocational education provider organisations, it became clear that stronger partnerships between participating institutes and international providers would lead to a more appropriately designed training intervention. The partnerships require an agreed format and approach to achieve success, including:

- a) Assistance in building and deploying models which facilitate VET programs which ensure relevance and effectiveness;
- b) Maximising industry engagement and participation in the design and development of standards and competencies;
- c) Greater efforts in building consensus and agreement on technical issues and, more broadly, policy;
- d) The exploration for the combining of project activities, particularly around delivery and standardisation to enhance efficiency;
- e) Intensive human capability and capacity development, with greater focus placed on quality improvement efforts at the individual, organisation and system levels; and
- f) The creation of multi-national ‘expert’ working groups to better facilitate the exchange of knowledge, skills and experiences.

It became apparent from this perspective that international partnerships require some considerable appreciation of the local need *vis a vis* the intent and nature of the international offering, otherwise the end result will be an imposition on local training from abroad. Foley [25] argues that introducing pedagogical frameworks from well-funded and advanced international sources, places immediate hegemonic impositions on policies within developing countries. Whilst attempts to update and ‘revitalise’ VET provision are necessary, we caution that the importation of these approaches without first examining the impact of these approaches can be counterproductive in the long-term.

In a similar situation, the Government of Timor-Leste, in the early years of establishing human resource capability across the public service, relied upon importing ‘international consultants’ to carry out policy and programs including those in vocational education. Hill (25) further contends that the insistence around giving the international consultant the pivotal role only serves to perpetuate an understanding that indigenous knowledge is lesser than ‘foreign’ knowledge.

4.2. *VET and its impact*

VET has a key role in provisioning education and training interventions for often divergent learning needs, and this is in contrast to more traditional teacher-led approach and is more like what is perceived as ‘academic schooling’. VET is unique, in that it proposes a paradigm shift in educational provision which facilitates learner’s experiencing success through the acquisition of knowledge, skills and attributes which prepare them for the world of work [26]. Lugg, writing in Cooper and Walters work titled *Making Different Equal* [27], noted that the more ‘localised’ the nature of a National Qualification Framework (NQF), the greater is the learner impact, as boundaries between local and distant approaches weaken the

impact of training. However this focus on the needs of local systems increases the pressures on the nation states to when restructuring systems development in alignment with global pressures.

Furthermore, Griffin, Curtin and Research [28] believe the VET sector is well placed to assist in the facilitation of growth locally, particularly through its presence regionally and its role in developing local human capital, particularly with their impact on non-formal learning structures in agricultural production and local businesses [29]. It is now a question of how the Indonesian VET sector responds to these challenges and what the impact will be on other ASEAN nation states VET systems as they endeavour to eliminate these deficits. For these interventions to have impact, fundamental and systematic changes are needed. These programs need to design for: (a) increased integration of VET with the higher education system, with a particular emphasis on academic transference; (b) greater industry input and engagement with a view to creating a more responsive human resource development environment; and (c) better assurance, particularly around the reliability, comparability and quality of programs.

5. Conclusions

In this paper, we explored the current hidden implications of uncritically importing ‘external knowhow’ into the Indonesian VET sector, and have acknowledged the value of engaging ‘local’ indigenous knowledge which has particular cultural relevance in developing appropriate training models. We have placed a cautionary note on the growing reliance on ‘external’ models of engagement, since these may have unintentional implications for appropriate and sustainable vocational training models.

We thus suggest that the first steps in any critical analysis of skills development and training in the form of transference, should begin with the questioning and decoding of the assumptions that underpin the intentions of the international partners and providers. It is further suggested that Easterly’s [13] line of enquiry is of particularly relevance. Easterly [13] proposed a series of questions which sum up the authors’ belief that the re-skilling journey has just begun, and more open discussions need to be encouraged to ensure mutual, and moreover sustainable benefits, from foreign investment, interventions and funding. Responding to these questions, proposed by Easterly, will provide insight into the intention of foreign engagement. The authors leave you with these questions to raise further academic and scholarly thought in this area: ‘*Whose management systems are involved?*’, ‘*Whose outcomes are central?*’, ‘*For what purpose are they sought?*’, ‘*Whose standards are to be attained?*’, ‘*Why have these standards been chosen?*’, ‘*What works and what have we learnt from past success?*’, ‘*What type of service delivery is to be introduced, and to whom, how and in what context?*’, and ‘*What incentives exist to ensure success and make donors accountable?*’ [13].

References

- [1] Sevrani K and Gorica K 2012 Globalization Process and the Impact of IT Growth in Albania *ISSN 1931-0285 CD ISSN 1941-9589 ONLINE* 277
- [2] Marques J, Dhiman S and King R 2011 Managing Globalization: A Spiritual Perspective *Business Renaissance Quarterly* 6 19
- [3] Anderson D 2006 Globalisation, training packages and private providers: emerging tensions in national VET policy. In: *Global VET: Challenges at the Global, National and Local Levels*, (University of Wollongong: AVETRA)
- [4] Maclean R, Wilson D and Chinien C 2009 *International handbook of education for the changing world of work: Bridging academic and vocational learning* vol 1: Springer Verlag)
- [5] Maclean R and Lai A 2011 The Future of Technical and Vocational Education and Training: Global Challenges and Possibilities *International Journal of Training Research, The* 9 2-15
- [6] Volkoff V and Perry J 2001 On the Road Again: Supporting VET Development in a Globalised Context. In: *Fourth International Conference 'Vocational Education and Training Research*, (University of Wolverhampton)
- [7] Junarsin E 2009 Worldwide globalization and its impacts on developing countries: The case of Indonesia *Journal of Global Business Issues* 3 105

- [8] Boehrer J and Linsky M 1990 Teaching with cases: Learning to question *New directions for teaching and learning* **1990** 41-57
- [9] Marginson S 1999 After globalization: emerging politics of education *Journal of Education Policy* **14** 19-31
- [10] Fairman B F 2017 Looking for a way out: Skills development and training and its impact on aid practices and their development outcomes, with particular reference to Indonesia and Timor-Leste. (Victoria University)
- [11] Pruetipibultham O 2012 Developing human resource development interventions to aid expatriates' cultural adaptation: insights to the Javanese culture *Human Resource Development International* **15** 109-17
- [12] Powell M 2001 A comparative study of TVET projects — implementation experiences from Jamaica and The Gambia *International Journal of Educational Development* **21** 417-31
- [13] Easterly W 2007 *The white man's burden : why the west's efforts to aid the rest have done so much ill and so little good* (Oxford: Oxford University Press)
- [14] Allais S 2012 Will skills save us? Rethinking the relationships between vocational education, skills development policies, and social policy in South Africa *International Journal of Educational Development* **32** 632-42
- [15] Easterly W and Pfitze T 2008 Where does the money go? Best and worst practices in foreign aid *Journal of Economic Perspectives* **22**
- [16] Kragelund P 2011 Back to BASICS? The Rejuvenation of Non-traditional Donors' Development Cooperation with Africa *Development & Change* **42** 585-607
- [17] Paryono 2011 TVET Initiatives in Southeast Asian Countries in Response to Increasing Labour Mobility within the Region and beyond *International Journal of Training Research* **9** 123-33
- [18] Carden F 2013 Evaluation, Not Development Evaluation *American Journal of Evaluation* **34** 576-9
- [19] Pilar P 2010 Evaluation of training in organisations: a proposal for an integrated model *Journal of European Industrial Training* **34** 673-93
- [20] Hagen R 2002 Globalization, university transformation and economic regeneration: A UK case study of public/private sector partnership *International Journal of Public Sector Management* **15** 204-18
- [21] Marginson S 1993 *Education and Public Policy in Australia* (Cambridge University Press Cambridge, UK)
- [22] Powles M and Anderson D 1996 Participation and Access in TAFE: Social Service or Economic Utility? *Australian and New Zealand Journal of Vocational Education Research* **4** 97-129
- [23] Brown P, Green A and Lauder H 2001 *High skills: globalization, competitiveness, and skill formation*: Oxford University Press, USA)
- [24] Abdullah H 2014 VET Training and Industry Partnerships: a Study in East Java, Indonesia. (Victoria University)
- [25] Foley G 2004 *Dimensions of adult learning: Adult education and training in a global era*: Open Univ Pr)
- [26] Abdullah H 2014 The role of VET providers in training partnerships with industry in East Java, Indonesia *TVET@ Asia, Issue1* 1-14
- [27] Cooper L and Walters S 2009 Learning/work: Turning work and lifelong learning inside out
- [28] Griffin T, Curtin P and Research N C f V E 2007 *Regional Partnerships at a Glance*: (NCVER)
- [29] Wallenborn M 2010 Vocational Education and Training and Human Capital Development: current practice and future options *European Journal of Education* **45**