

# Building a Culturally Relevant Workforce in Indonesia



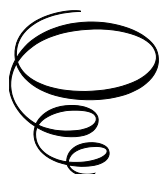
# Building a Culturally Relevant Workforce in Indonesia:

## *Preventing Vocational Imperialism*

Edited by

Brian Fairman and Adam Voak

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Preventing Vocational Imperialism

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## FOREWORD

My tenure as Director General of Vocational Higher Education and Profession has seen tumultuous and unprecedented change within Indonesia and across the world. The rapid advances in technology, increased globalisation, economic uncertainty and rising levels of human mobility, has challenged the Ministry of Education and Culture to think creatively about how we will equip the Indonesian future workforce with the skills, knowledge and attitudes needed to ensure its long-term sustainability and institutional agility.

Currently, we are experiencing one of the most dramatic disruptions to the global economy since the Global Financial Crisis (Krismon). Industry sectors, workforces and individuals have been affected in unimaginable ways. In addition, the worldwide COVID-19 pandemic has strengthened my resolve and commitment to build a resilient Vocational Education and Training (VET) sector for Indonesia. Indeed, building a respected and robust VET sector has been my life's mission. I truly believe that equitable access to Vocational Education across the entire community is fundamental to transforming economies, for building the workforce resilience needed to cope with constant and rapid change, and is ultimately a fundamental requirement for developing the dignity and abilities that employment provides for workers, families and communities.

As an emerging economy, Indonesia is constantly striving to learn from world's best practice and to integrate leading learning approaches into our Vocational Education delivery strategies. This book, with its honest and open approach to discussing the challenges and benefits of international interventions, is a cogent warning that mutually respectful engagement is an essential basis from which to reap the rewards of knowledge-sharing programs. As architects of these interventions, we must be constantly vigilant that our local workforce shapes both the domestic and international capabilities needed for Indonesian educators and trainers to take leading roles in future cooperative programs.

Vocational Imperialism is something about which we need to be ever-mindful. As we go forward into the new unknown post-pandemic environment,

more needs to be done to not only encourage fellowship with our international experts but also to work towards creating a productive environment for learning and development in Indonesia. There are many lessons to be learned around the positive and negative aspects of international engagement. One issue that immediately leaps to mind is that future relationships should always be constructed on a basis of mutual respect and trust. Such a condition will encourage environments which help nurture local practitioners to have the confidence and courage needed to lead, coach and mentor fellow Indonesians as we move into an uncertain future. I commend this book to you, as Indonesian practitioners and international consultants alike, hoping that you will use its insights, revelations and culturally applicable engagement approaches as a framework for future collaborations. I also encourage readers to look reflectively and inwardly to recognise our own unconscious biases so that we can work towards fostering respectful international relationships which are urgently needed to create a transformative workforce that ASEAN needs in order to remain competitive in an increasingly global competitive marketplace. In this respect, Human Resource Development will be a key ingredient for success.

Associate Professor Dr. Agus Indarjo MPhil.  
Director General Ministry of Education Indonesia (2020)



# VOCATIONAL IMPERIALISM: EDITOR'S NOTE

Whilst foreign models of vocational education and training (VET) interventions may still provide relevance to the Association of Southeast Asian Nations (ASEAN), it is becoming increasingly important to enunciate to what extent these foreign models hold cultural applicability.

In the interests of securing more appropriate interventions, it is time to examine the current effectiveness of foreign development assistance from the perspective of aid recipients and their impact upon local capacity building. We acknowledge the socio-economic challenges in each context are subtly different, and a well-intentioned but miscued planned intervention may lead to unintended consequences, especially when external influence is used for external gain. We describe these types of interventions as vocational imperialism. It is therefore essential that selected development models are transparently applicable to individual country and regional circumstances, and that the cultural mores of each site of these interventions are respected and addressed.

A careful consideration of, and investigation into, education and training interventions such as methodologies applied in existing training approaches, recognition of stakeholder requirements, articulation of recipient expectations, design of training interventions, monitoring and evaluation frameworks used to measure success, the use of foreign 'specialists' (*Bule*<sup>1</sup> in the Indonesian vernacular), and examining cross-cultural communication, would provide opportunities to improve existing practice. Any explicit improvements could have significant impacts on training interventions in terms of sustainable skills development in recipient countries, and for improved donor engagement.

The intention of examining current vocational training interventions is to more clearly inform practitioners of a range of meaningful approaches and

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<sup>1</sup> Bule is the Indonesian word used describe a 'foreigner' and comes with specific Indonesian cultural connotations.

policy directions for training program design, deployment and impact measurement. Encouraging recipient country ownership ensures 'meaningful engagement' and 'shared ownership'. Fairman (2018) has designed and presented a 'model of meaningful intervention practice', intended to guide future practice, which includes suggestions and approaches to give voice to the recipients of international aid, whilst providing valuable insights for policy makers, administrators, and trainers in both donor and recipient countries.

# INTRODUCTION

## HURRIYET BABACAN

This book had its genesis in the several concerns of a group of insider ‘practitioners’ working on Human Resource Development (HRD) and Vocational Education and Training (VET) issues in Indonesia. Because of their desire to contribute to a full and frank discussion regarding the problems faced by the VET sector and the varying agendas regarding its future, they wished to document and reflect more closely on aspects of the cross-cultural implications of their practice. These chapters present these thoughts and reflections of both national and international contributors to the VET arena, and express their own perspectives of what ‘meaningful engagement’ in an Indonesian context may have been in the past, and how this might be conceived differently in the current context. It was generally felt that a perception of a lack of clarity in directional and developmental practice in VET has become a critical issue, for not only Indonesia, but for many other emerging ASEAN Member States. This feeling is based on the growing body of observations that show, through unavoidable periods of political instability and somewhat undirected activity in the VET arena, that these circumstances have combined to leave elements of VET in need of serious reinvigoration.

Indonesia, in common with other ASEAN Member States in the years to 2022, is at an important ‘crossroad’ in terms of their international development. With the opening up of global markets and the concomitant internationalisation of supply chains, individual countries cannot afford to fall behind in terms of the readiness and flexibility of their workforce. This implies that local training schemes need to be constantly refreshed to meet increasing complexities of procurement, production and provision of services.

ASEAN Member States have attempted to introduce significant reforms around the notion of ‘connectivity’. In several instances, these have been introduced in the anticipation of providing a ‘seamlessly and comprehensively connected and integrated ASEAN region that will promote competitiveness, inclusiveness, and a greater sense of community’ (Secretariat 2016). This

vision was articulated in the Master Plan on ASEAN Connectivity, 2025 (Secretariat 2016, 7), and it was expected that these reforms would impact upon the design and development of VET initiatives and the improvement of human capital resources across each member state, in significant and specific ways, including the use of ‘English’ as the *lingua franca* for the region and our text. The chapters in this book explore the perspectives of several administrators, Government officials and VET practitioners’ perspectives on how VET reform impacts on their sectors, particularly in relation to human resource development and connectivity within the ASEAN region. In the Indonesian context, unanticipated consequences have arisen with a number of well-meaning attempts by international aid organisations to assist the VET sector. These issues are the subtext of this book.

At the outset of these VET developments, the key themes that were expected to emerge from increased engagement with contemporary workforce development, were those that dealt with the complexities and challenges of building human resource capability, whilst simultaneously attempting to meet industry expectations. The application of new ways of introducing competencies and developing occupational standards relevant to specific and targeted industries are hoped to provide significant stimulus to the employment rate and the national economy. The introduction of new ways of developing standards inevitably clashes with older and pre-existing ways of engagement, and this conversation is outlined in Chapter Eight ‘Unshackling Bule Dependence’.

In Chapter One, Payaman shares his growing concerns that, after many years of educational policy initiatives, the Indonesian labour force remains poorly educated and ill-equipped to tackle the growing challenges of meeting contemporary industry requirements. His discussion includes a detailed description of the relationship between the ‘world of work’ and the current Indonesian education system’s attempts to bridge the current hiatus in knowledge and practice which is becoming increasingly evident. Payaman’s perceptive insights into this issue also provide a timely warning in regard to the uncritical importation of external VET practices into the cultural milieu of contemporary Indonesian society (Simanjuntak 2005). His consequent emphasis upon the need for a calculated move away from traditional Guru-centred to a more inclusive student-centred education makes a compelling case for change in the VET arena, and signals the need for new training practices in the context of essential international aid

initiatives. This includes challenging notions of dependence upon international experts for answers to 'local' concerns in VET.

In this respect, it is well known that international donors and bilateral partners have been a consistent feature of Human Resource Development and Vocational Training throughout the 1970s, a feature that continues to this day. Payaman shares his insights into the lessons learnt from relevant previous engagement with western models of best practice in VET in Indonesia and sets the scene for later discussions regarding issues related to Vocational Imperialism.

The challenges the Government of Indonesia have confronted in managing and administering some of these identified VET reforms, relate to the lack of a 'centralised and coordinated' response to vocational training, which we contend is a product of institutes and ministries going their own way. This is known as 'ego sektoral' (pursuing their own sectoral interests) resulting in inefficiencies in training implementation. In Chapter Two, Abdullah advocates a nationally planned response, which may confront public administrators in implementing such a response.

Noting that 'sektoral' barriers constrain career pathways and individual professional development for trainers in both private and public sectors, the National Public Administration Body (NIPA) has uniformly mandated notions of competence across managerial, social and cultural and technical competence with the intention of creating unity across the entire Indonesian public service. In Chapter Three, Amarullah and Irawati examine these issues. In a country where there is a lack of uniformity around implementing national standards or even moving towards the acceptance of such standards in varying Government ministries, it promotes a situation that creates not just human resource development issues, but potentially perpetuates a 'silo' mentality.

In Chapter Four, Voak positions the HRD development conversation in a global context by responding to the issues that Indonesia faces in terms of human mobility. Meeting this challenge will require substantially improved productivity and efficiency capabilities within the Indonesian labour force, and as such the role of VET becomes critical. ASEAN Member States face similar challenges in human mobility, and this book cautions against the dependence upon foreign models of development assistance.

In illustrating this dependence, in Chapter Five Semanjutak and Maliki examine the paradoxes and dilemmas in workforce development, beginning with training needs assessments. Noting that training needs assessment (TNA) tools are often developed in a Western-influenced context with hidden cultural biases, the application of these instruments are required to be balanced, and should be culturally relevant for training the Indonesian workforce. Whilst examining three case study applications of these TNA instruments, we highlight some of the issues and concerns with these applications and illustrate the importance of gaining acceptance of recipient country expectations.

The workforce development issues extend to addressing the challenges for practitioners working across cultures. To this end, a cultural lens is applied to a particular training intervention, and the engagement and differences in perspective become palpable, the intent of this discussion is to reveal the diversity and cultural perspectives, showing evidence of cross-cultural communication and providing evidence of sharing of program outcomes, in order to move toward a more meaningful engagement process. Failure to do so reinforces existing practices and notions of 'the way things ought to be'. Vocational Imperialism begins by accepting without question existing practice, and, in Chapter Six, Sayuti and Fairman describe an approach that may assist other practitioners examine their existing practice.

Similarly, recognising stakeholder requirements is at the core of meaningful engagement, and working with industry is central to successful vocational training interventions. In this respect, finding ways of developing and sustaining links with industry, ultimately requires building trust and collegiality. In Chapter Seven, Abdullah and Soeparto note that the building of successful alliances with industry requires excellent cross-cultural communication skills, and recognise that being cognisant of industry needs commitments to partnership development from individuals and institutes alike. As such, the articulation of industry intentions and objectives is a pre-requisite for meaningful practice engagement.

An intriguing, and at times confronting notion, is that foreign models of engagement and 'know-how' are sometimes not welcomed. In Chapter Eight, Voak and Fairman explore the impacts of foreign know-how, including the unshackling of dependence upon foreign interventions by providing opportunities for local interventions and more inclusive implementation discussions to occur. These are necessary components which are required for more meaningful practice interventions.

The subtext for much of the writing from all authors, is the building of a responsive, agile and resilient workforce in Indonesia. In the concluding chapter, Chapter Nine, Fairman examines the notion of Vocational Imperialism, describing the practitioners' experience of dependence and foreign interventions and their consequent impacts upon a nascent developing vocational training sector. In this chapter, Fairman advances a 'harm minimisation' approach, by articulating a model of meaningful practice intervention' which has, at its core, a set of conditions, and questions that must be asked of all stakeholders and practitioners before engaging in vocational training interventions.

## CHAPTER ONE

# DEVELOPMENT OF VOCATIONAL EDUCATION AND TRAINING IN INDONESIA

PAYAMAN SIMANJUNTAK

Since breaking ties with their Dutch colonial past, Indonesian Governments have focused heavily on developing their workforces through a series of Vocational Education and Training (VET) interventions. Within a largely subsistence agricultural society (Geertz 1963), Dutch interest in education focused primarily on producing a ‘trading class’ of workers to assist in the exportation of the natural resources from the archipelago. The Dutch East Indies Company colonised the Indonesian archipelago for 300 years, and its primary task was to produce high annual profits with little capital input (Kahin 2003), with no inclination to build an administrative or educational system. Education which was provided during this time, primarily included the ruling and business classes, leaving the vast populace devoid of educational opportunities (Kahin 2003). In recent times, throughout the 1970s, 80s and 90s, Indonesian Governments have worked towards implementing nine years of Universal Education. Further, in those formative years after independence (1945), a staggering 20% of the national budget was allocated to education.

Entwined within those significant investments, were a series of VET focused programs which included *Bekerja Sambil Belajar* (Work and Study). This was combined with compulsory primary education across all National Desa (Villages) (Yeom, Acedo, and Utomo 2002). The VET interventions were included in this raft of allocations, as a result of this sizeable early government investment. However, the last three decades have seen limited focus on building on these initiatives which has led to many challenges within the current labour market, particularly in regard to structural issues, which is limiting access to a qualified and trained workforce. Consequently, a significant re-structure of VET is required to build a workforce to meet the national training goals and to make Indonesia



competitive within the ASEAN nation states. This re-structure must also consider the current ‘teaching-learning’ paradigms. In this chapter, and later in this book, we explore the movement away from traditional teacher-directed learning to facilitative or learner-centred learning. There are encouraging signs that this shift in pedagogical approach has begun to take root, starting with the introduction of the Freedom to Learn government initiatives.

The Indonesian economy, like many emerging countries, grapples with high levels of unemployment, particularly among graduates of High Schools, Colleges and Universities. This situation may sound counter intuitive, however commentators believe this is a consequence of the mismatch between graduate competencies and workplace occupational requirements (Sayuti 2016). However, the tide seems to be changing as the President of the Republic of Indonesia, Joko Widodo, stressed in 2019, the importance of education, particularly regarding a focus on VET which is concerned on employment outcomes and preparing Indonesians for the new and emerging sectors of the economy (Dayaram et al. 2020). The Ministry of Education, Culture, Research and Technology RI, introduced the Merdeka Belajar Kampus Merdeka (MBKM) (Free Learning Free Campus) policy to reframe the educational engagement with industry and civil society, whilst at the same time transforming and ‘freeing’ the Indonesian education sector from a ‘one size fits all’ paradigm. The current Minister of Education, Nadiem Makarim, described this policy shift as ‘emancipated learning’ (Neumann 2021). Kampus Merdeka, on one level, can be seen as ‘freeing the learners’ to develop an educational experience that matches their individual needs. Others may view this policy initiative as embedding the ‘industrialisation’ of education into the mainstream, promoting industry requirements over personal development (Kodrat 2021). The ability of educational institutes to engage with industry and civil society to implement the Merdeka Belajar Kampus Merdeka reforms, becomes critical to the success of this program and this book explores the challenges of this engagement.

## **A History of VET Interventions in Indonesia**

The Indonesian VET landscape is paved with an array of direct interventions by the Indonesian government, including the most recent and audacious Merdeka Belajar Kampus Merdeka. One such intervention occurred at the Junior High School level, which caters for Primary School graduates. This technical-based institution is called Sekolah Teknik (ST) and was developed to specialise in trade industry sectors such as construction, plumbing,

electricity, heavy industry and the automotive sectors, with graduates trained to perform operational employment responsibilities. At the Senior High School level, Sekolah Teknik Menengah (STM), students were prepared for supervisory roles in these same industry sectors. Sekolah Teknik students graduate at the age of 15 or 16 years, but they are considered too young to accept employment in relatively high-risk occupational settings. In addition, in the early 1980s the Indonesian Government introduced a compulsory nine years of universal education for all students, which required them to complete the equivalent of Junior High School. As a result of these policy changes, all the existing STs were upgraded to the level of STMs to cater for enrolments from Junior High School graduates. In a parallel development, the Government also established several Polytechnic Schools focused on college level education.

Additionally, during the early years of Independence, the Indonesian Government established several Vocational Training Centres (VTC). By 1979, there were approximately 130 public VTCs operating under the auspices of the Ministry of Manpower (Sayuti 2016). In addition to these publicly administered VTCs, some privately administered institutions were also established. In the following decade, the Ministry of Manpower established an additional 120 VTCs in several Districts across the archipelago, using international donor assistance and finance through The World Bank. In order to support this significant increase in the operational requirements needed for these new VTCs, in the mid-1980s, the Ministry of Manpower introduced the Manpower Development and Training Project. This project initiated a number of successful activities including (i) the Labour Market and Manpower Planning Information System, (ii) the National Training System, (iii) a Mobile and Open Training Program, (iv) Management and (v) a suite of related human resource development activities including the training of around 2,000 instructors in Indonesia and abroad.

## **Manpower Conditions-Education Levels in the Indonesian Workforce**

With regard to the Indonesian government's Vocational Education and Training (VET) policy initiatives, these can be better appreciated by an examination of recent labour force and unemployment data when compared to education levels. This analysis paints an interesting picture as to their impact. The Indonesian labour force has relatively 'low levels' of education (Allen 2016) which directly impacts on the availability quality of human

resources. In Table 1.1, the labour force and unemployment rates are compared to educational levels in Indonesia during 2019, and this highlights that more than 38% of Indonesia's total labour force in 2019 only reached Primary Level schooling, with little more than 55% completing Junior High School equivalent, and only 12.4% of the total labour force consisting of college and university graduates.

Table 1.1 Labour force and unemployment rates compared to educational levels in Indonesia, 2019

Level of Education	Labour Force		Unemployed (000)	Unemployment Rate (%)
	(000)	%		
Not completed Primary	19,522.9	14.62	383.1	1.96
Completed Primary School	31,895.8	23.88	857.2	2.69
Junior High School	23,747.3	17.78	1,128.0	4.75
General High School	25,185.5	18.86	1,994.8	7.92
Vocational High School	16,568.1	12.40	1,727.2	10.42
Diploma	3,627.0	2.72	217.3	5.99
University Graduates	13,014.4	9.74	738.2	5.67
Total	133,560.9	100.00	7,045.8	5.28

Source: National Labour Force Survey (SAKERNAS), August 2019, page 36.

It is relevant to recall that the Indonesian Government, in its introduction of compulsory primary education through the issuing of Presidential Decrees, specifically called for the development of at least one Primary School at each Desa (Village). This policy initiative was called Inpress SD, and meant that primary students were exempt from paying tuition fees and did not have to meet the costs of required books. Nevertheless, even with the support inherent in these Decrees, the number of people in the labour force with primary education has not significantly increased. Moreover, since the early 1980s, the Government of Indonesia has introduced a policy of universal education up to nine years of age, which is equivalent to graduating from Junior High School. In this initiative, the Government invested heavily in improving education facilities, and again exempted students from all tuition fees. However, once again, this initiative has been unable to assist more

Indonesian students to gain a Junior High School equivalent education. The tendency for rural young people to leave school in order to supplement and support the families' income may well be a reason for this outcome.

In addition to the policies already described, in the mid-1970s, the Government of Indonesia launched a suite of packages termed *Bekerja sambil Belajar* (Kejar), a 'work and study' program involving working while engaged in some form of study. These packages were divided into: Package Kejar A, equivalent to Primary School level, Package Kejar B, equivalent to Junior High School level, and Package Kejar C, equivalent to Senior High School level. More recently (in early 2000), the overall educational budget has been set at 20% of the total National Budget. This includes allocations from Provincial and District Budgets, but, up until this time, Indonesia has not seen any significant improvement in educational participation.

### ***Informal Sector***

The informal, or unregulated sector of the workforce, represents the largest fraction of the available population engaged in employment in Indonesia today (Allen 2016). The formal sector of the economy absorbs less than 50% of the labour force, and, exacerbating this problem, emerging graduates of General High Schools and Vocational Schools generally look for jobs in the formal sector. Table 1.1 illustrates that almost two million General High School graduates and 1.7 million Vocational School graduates in 2019 were registered as unemployed. Likewise, the majority of Diploma and University graduates seek employment in the formal sector but cannot be absorbed due to the lack of employment opportunities. Around 750,000 graduates from colleges and universities were unemployed in 2019 leading, at least anecdotally, to speculation that there may be a mismatch between their competencies and the skill requirements needed in the modern economy. Anecdotal evidence also suggests that most of these graduates are very much dependent on the jobs of the formal sector and are not pursuing other employment options, including those of self-employment.

### ***The Role of Vocational Education and Training***

The world of education, particularly in the Primary schools and Junior High schools, is generally intended to prepare students with basic knowledge such as reading, writing and simple calculation abilities or mathematics. After finishing Junior High school, the students have an option to continue

with general education at a General Senior High School or to prepare for entry into the labour market through vocational training. Therefore, Vocational Training should play an important role in bridging the world of education with the world of work.

In this respect, the world of work generally requires human resources with specific competency requirements consisting of three elements. These are (i) broad insights regarding knowledge, (ii) practical skills and (iii) an appropriate attitude to work. In an attempt to produce students with a balanced awareness of these three workplace components, the Indonesian Government, in the early 80s, introduced *Kuliah Kerja Nyata (KKN)* which is Student Study Service. This policy encouraged university students, who had finished their academic course work, to undertake experience in practical work for several months at businesses and companies or within communities. Today, only a few Universities continue to encourage this practice, and this may explain why many College and University graduates remain unprepared for the world of work, and are thus not easily absorbed into economy. As noted in Table 1.1, 217,300 College graduates and 738,200 University graduates were unemployed, revealing a rate of unemployment of 5.99% and 5.67% respectively.

Today the *Merdeka Belajar Kampus Merdeka (MBKM)*-Internship and Community Service programs extend this early 1980s version of student study service to include engaging for up to six months in a placement in Industry. This placement is recognised as part of the students' academic results. Gaining credit for community service and industry placement may prove to be the right incentive for preparing graduates for the world of work. The implementation of MBKM suggests that many of the problems faced in the 1980s remain, with institutional take-up being low, and individuals having to 'secure' and support their placements. In addition, benefits of internships are still unclear, particularly around skills development (Defrizal et al. 2022). In this context, it may be necessary to examine the way students 'learn' both in the classroom and in the workplace. As a consequence, we intend to explore in this book the 'teaching/learning' relationship and uncover possible approaches that may prove more culturally relevant in a country that is multi-lingual, multi-cultural and ethnically diverse.

The Indonesian Government, in recent years, has also promoted the development of Vocational Education through pre-professional high schools focusing on vocational curriculum, called *Sekolah Menengah Kejuruan's*

(SMK), together with Polytechnics in specific industry sectors and professions. Vocational Education has focused on incorporating the element of practical work and training into the educational system (Misbah et al. 2019). This has resulted in the practical learning of vocational training being valued equally with other aspects of general knowledge in the Vocational Education system. This is currently restricted, and is impacted by insufficient numbers of providers having enough training equipment and consumable training materials to approximate learning in the workplace.

Nevertheless, recent data from the Ministry of Education shows some promising trends in SMK outcomes. In 2018/19, there were 14,064 SMKs, consisting of 3,578 public SMKs and 10,486 private SMKs, which provide around 1.47 million graduates to the Labour Market every year (Table 1.2).

Table 1.2 Vocational High School statistics in Indonesia, 2018/2019

Item	Public	Private	Total
Schools	3,578	10,486	14,064
New Students	783,827	985,812	1,769,639
Total Students	2,185,796	2,823,469	6,009,265
Graduates	629,873	842,130	1,472,003
Drop Outs	7,902	17,455	25,357
Teachers	146,630	166,038	312,668
Class Rooms	66,188	96,889	165,077

Source: SMK Statistics, Ministry of Education and Culture, 2018/19, page 1.

In a similar manner, Polytechnic Schools have expanded considerably. In 2017, there were 190 Polytechnics, consisting of 43 public Polytechnics and 147 private Polytechnics. Recently, these Polytechnics received around 62,000 new students and produced around 45,000 new graduates per year entering the labour market (Table 1.3).

Table 1.3 Polytechnic school statistics in Indonesia, 2017

Item	Public	Private	Total
Schools	43	147	190
New Students	38,948	23,149	62,097
Total Students	149,180	98,672	247,852
Graduates	25,859	19,470	45,329
Lecturers	7,568	5,772	13,340

Source: Educational Statistics, Indonesia, 2017, page 15.

Despite these encouraging increases in the provision of Vocational Education at SMKs, Polytechnics and Diploma programs, the labour force data does not reveal increases in successful graduate outcomes. As shown in Table 1.1, the rate of unemployment among SMK graduates was 10.42%, and amongst Diploma graduates around 6%. A possible explanation for these results may be a lack of employment opportunities but it is suggested that problems arise as a result of delivery and interventions in the Vocational Education system should be considered, particularly in relation to;

Rigidity in curriculum design;

Budget allocations, particularly in relation to consumable materials required for practical works; and

Pedagogy and learning approaches that enable critical thinking, innovation and creativity (Sayuti and Mujiarto 2018).

Table 1.1 also reveals that the labour force, with its low level of education, undertakes most of current employment outcomes, and it appears that this work is mostly in the informal sector, particularly agriculture. As illustrated in Table 1.4 below, almost 30% of the workers were in the agriculture sector, 23% in the trade sector, and 17% in the services sector. This illustrates that around 70% of the Indonesian workforce were employed in these three sectors alone, which are characterised by low levels of education and rudimentary technologies.

Table 1.4 Indonesian Workers in various sectors of the economy, 2017

Sector	Workers (x1000)	%
Agriculture	35,923.9	29.69
Mining	1,391.7	1.15
Manufacture	17,008.9	14.05
Electricity and Gas	393.9	0.33
Construction	8,136.6	6.72
Trades	28,173.6	23.28
Transport	5,759.7	4.76
Financial Institutions	3,752.3	3.10
Public Services	20,481.9	16.92
Total	121,002.4	100.00

Source: National Labour Force Survey (SAKERNAS), August 2017, page 13.

### *The Roles of the University Sector*

In Indonesia, Universities and vocational providers have, for some time, engaged with industry with mixed success, as institutes and ‘industry’ do not always share the same understanding of the role of education. The role of the University sector was originally to conduct education suitable for the Sarjana or graduate level, through increasing knowledge in a specific field. It was assumed that by finishing a graduate study, every graduate was automatically able to apply all his/her knowledge to the world of work. As the tertiary education system further developed, Universities today have been characterised by learning and research methods based on multi-discipline, inter-discipline and trans-discipline understandings (Oey et al. 2017). In line with this perception, every Sarjana is expected to have critical thinking, creativity and innovation skills, not only suitable to work with current digital technologies and automation, but also to evidence improved imagination, invention, and entrepreneurship capabilities, with the added ability to apply digital technologies to an optimum level.

Furthermore, Oey et al. (2017) concluded that in facing increased levels of digital technology and automation in the near future, every university graduate should have developed several key capabilities. These are:

- Capability of critical thinking, creativity, innovation and sensitivity a range of challenging circumstances and be able to respond with an interdisciplinary and multi-disciplinary approach;
- Ability to apply informational communication technology including basic computer familiarity with word processing, spread sheet usage, and PowerPoint presentation, in addition to having basic research capabilities;
- Ability to be inclusive of cultural divergence and receptive to values of various cultures of other ethnic group, race and religion;
- Capability to develop teams and conduct negotiations including sharing knowledge with others;
- Communicating effectively by using various forms of information technologies;
- Capability to think globally whilst acting locally and collaborating internationally;
- Ability to collect, process and analyse data in order to support quality decision making; and
- Exhibit citizenship in an Indonesian context, understanding the history and goals of national identity in Indonesia, including its various diversities of local wisdoms, traditions and cultures (Oey et al. 2017).

Adding to the dilemma faced in introducing these capabilities and ‘soft skills’ into the curriculum, Tikly et al. (2003) described the central importance



of 'citizenship' skills in an agrarian society. Currently, society is going through significant social and political reconstruction, making the task of selecting appropriate skills for the future even more challenging. It is generally recognised that the Merdeka Belajar Kampus Merdeka MBKM policy will provide opportunities for students to gain wider learning experiences and new competencies. This will come through the provision of several learning activities outside of their existing study program, which are designed to produce graduates who are ready to engage in the increasingly complex challenges of life in the 21st century. Junaidi (2020) argues that it is therefore incumbent upon all Indonesian Universities to make the necessary curriculum adjustments to ensure the quality and intention of the new learning processes in accordance with the Ministry of Education's SN-Dikti program guide for the support of the Kampus Merdeka program. This 'guide' defines the curriculum changes required in the development of 'new' literacies, which are understood to be (i) Data literacy, (ii) Technological literacy, (iii) Human literacy and (iv) a noble character based on a deep understanding religious beliefs (Junaidi 2020).

In parallel with this priority, universities should be able to produce qualified teachers for the Primary Schools, Junior and High Schools, and qualified lecturers at the Diploma Programs and Polytechnics, as the quality of graduates from these Schools very much depends upon the quality of teachers and lecturers. It is our understanding that, there is an *ad hoc* recruitment system applied to the selection of lecturers for universities in Indonesia, particularly in relation to private universities. Most universities still focus on recruitment of permanent staff to satisfy the Government of Indonesia's minimum requirements of lecturers for every study program. Our experience reveals that in many University Magister (Master) study programs we find that qualified Doctors and Professors are on the lists of Lecturers, even though they may attend and deliver classes only two to three times per semester. It is a common practice in universities that more senior academic staff deliver a minimum number of lectures, the majority of the teaching being carried out by Masters level assistants, which has implications for the quality of the university education that Indonesian graduates receive.

Lecturers at Doctor and Professor level lecturers are paid relatively low incomes in Indonesian universities, despite the Government of Indonesia providing 'incentives' to private lecturers. University lecturers' work consists primarily of teaching commitments, with little time for research, many supplementing their income with individual student tutorials and

thesis preparation. As a result of this focus on teaching most of the lecturers do not have enough time to conduct research, write texts and to improve the quality of their teaching material. It is a sad reality that in Indonesian universities, most of the teaching materials are old and not up-to-date; they do not reflect new working conditions, technologies, and Government policies. The Indonesian university sector would benefit from the development and implementation of specific plans and programs to improve the quality and competency of all lecturers, particularly when facing the era of digital technology.

### ***The Role of Vocational Training***

There are arguments that the essential role of education is not only for preparation for work, since it also includes building skills for living, enjoyment of learning, and provides improvements in literacy and numeracy. It is therefore not surprising that the education system and the world of work are not aligned, with some arguing that the gap is widening. As previously noted, the data indicates that there is an inverse relationship between the level of education and the likelihood of being employed as a percentage of overall labour force statistics (Table 1.1).

As previously noted, the Indonesian school system is not responding well to the training needs for the world of work. There is a widening gap between 'schools' and the 'world of work' so there should be a consideration of some form of transition. This could be described as a bridging exercise, where 'vocational training' would supply the content. Vocational training's role in this situation would be to equip the school graduates with specific work-ready skills in order to be qualified to perform the job according to the industry requirements.

In attempting such a process, because more than one third of the labour force has a very low level of education, it is unlikely that any educational intervention will be able to engage workers already in the area in formal schooling. Second, the labour force data indicates a high unemployment rate among Junior and Senior High School graduates, and to some extent among the graduates of Colleges and Universities. There may be many explanations for this, but it is generally assumed that a low level of competency and mismatch with job requirements plays an important role. Third, the graduates within the Indonesian educational system generally have a limited capacity to develop their creativity and innovation skills. They generally seem to be very slow to adapt and respond to rapidly

changing demands from a globalised economy. Finally, there will be consequences of the application of disruptive technologies, where many workers may lose their jobs because they will be replaced by automation. Those displaced workers will need to be trained with new skills in order to remain productive within the changing economy (Chang, Rynhart, and Phu 2016).

With these caveats in mind, a renewed focus on restructuring vocational training may be required in the workplace to ensure workers and employees are given reasonable opportunities to develop more appropriate and relevant new skills, providing opportunities for these workers to transition into the new and emerging industry sectors or develop workplace competencies relevant to the changing needs of Indonesian workforce.

In Indonesia, vocational training is conducted in several forms, including formalised training at the Vocational Training Centres, apprenticeship training, and 'on the job' training in industry. In the past, the Ministry of Manpower managed and operated more than 300 Vocational Training Centres (VTC), but under the Indonesian policy of 'decentralisation' in the year 2000, with most of these VTCs being transferred and administered by Autonomous District Governments (Sayuti 2016). In addition, several other Ministries also conduct vocational training centres to supply trained employees in their respective Ministry, as well as providing opportunities for these trainees avail themselves for industry and the labour market.

Authorised companies, in cooperation with the Government of Indonesia, also conduct apprenticeship training. Apprenticeship training is expected to supply graduates to the respective companies in addition to supplying labour to the market. In addition, several companies conduct 'on the job' training for their own personnel. In lieu of a wide complement of training institutions and vocational training programs, significant numbers of the existing labour force have participated in training programs. For example, through its VTCs in 2018, the Ministry of Manpower trained 383,132 members of the labour force, and through apprenticeship training an additional 149,064 workers, including job seekers. In 2019, the Ministry of Manpower planned to train 660,476 members of the labour force through VTCs and another 360,864 workers including job seekers through apprenticeship training programs (Table 1.5).

Table 1.5 Graduates from Vocational Training

Year	Training	Apprentice	Certification
2015	92,236	31,915	158,315
2016	171,902	62,382	390,277
2017	259,742	133,474	862,366
2018	383,132	149,064	1,346,559
2019	660,476	360,864	1,875,748

Source: Ministry of Manpower, 2019.

Table 1.5 illustrates that Indonesia has a significant and growing number of vocational training centres and programs owned and managed by public or private institutions. However, the implementation of these vocational training programs has not been well coordinated according to the National Training System (State Secretariate Republic of Indonesia 2006), as formulated by the 2006 Government Regulation Number 31. It remains uncertain whether graduates from those vocational training programs can be easily absorbed into the existing employment market.

While awaiting the identification of training needs, particularly in respect of disruptive technologies, Sayuti (2016) suggests that the Government of Indonesia could develop policies and programs in order to; (i) coordinate all vocational training institutions and programs, owned and managed by the Government and/or private organisations, including training programs arranged by companies to make sure that all of them are operated according to the Presidential Regulation No. 8 Year 2012 on Framework of National Qualification (Kerangka Kualifikasi Nasional Indonesia - KKNI); (ii) implement vocational training based on workplace competency requirements, through selected pilot programs in all vocational training institutions; (iii) introduce VTCs, run by the Ministry of Manpower, with the authority perform the following duties:

- Develop programs and curriculum of vocational programs,
- Develop training modules,
- Develop training supporting elements,
- Conduct instructor training,
- Provide innovation and the development of vocational training,
- Develop quality assurance of the implementation of every vocational training program; and
- Establish, in the near future, a national institution to coordinate vocational training.

These authorisations are mandated by Verse 28 of Law No. 13 Year 2003 on Manpower, and Verse 10 of Government Regulation No. 31 Year 2006 on National Vocational Training System (Sayuti 2016)

### ***The Role of Teacher and Instructor***

As mentioned previously, the quality of the graduates from the VET system depends very much on the quality of teachers and instructors. Teachers and instructors in Indonesia are recognised as “Guru”. Traditional Indonesian cultural mores have perpetuated and inculcated the role of the 'Guru' into the psyche of the educational landscape. The word 'Guru' is used quite uniformly in Indonesia to indicate a person who is both respected and honoured. This professional status and social position brings with it a culturally understood ‘teacher-cantered’ approach to the classroom, where the Guru is referred to, in Indonesian parlance, as ‘digugu dan ditiru’ - obeyed and imitated (Fairman, 2018). The notion of Guru is still highly prevalent in Indonesia today. The view that the Guru is the fountain of all knowledge and, to be successful learners, students have to sit, listen, obey and follow, is widely evident from primary schooling through to university-level education in Indonesia. Whilst there is some evidence and desire to alter this notion of education, it remains a powerful cultural marker in the Indonesian context.

Moreover, in a world that is both rapidly changing and being open to external economic and developmental pressures, learners with a traditional education are being required to reskill at an increasing rate and to quickly respond to these challenges. Students need to take an active role and participation in the learning process and they must become the centre of the learning process. In other words, the educational and vocational training system of the ‘Guru-centred’ style should be moving towards a more ‘student-centred’ approach, the implications of which are that trainers will perform the role and functions of mentors, coaches and guides for students. There are two important outcomes of this change to student-centred learning. First, a learner who is familiar with life-long learning techniques will have a significant advantage when faced with the changing nature of the work environment, both in terms of the task to be performed and the tools which are available to achieve task completion. This is particularly so with the advances in information technology. Second, with the almost inevitable changes of employment which many people will face during their career, the application for a new position will be made more tractable, and this will include the ability to shift to another industry or apply for

promotion within a changing industry environment. A student-centred learning approach will assist in developing the required new skills and workplace practices (Fairman 2018).

As a consequence of these changes, there is a need to address this issue of teaching and learning style in Indonesia, particularly in light of the global challenges, which will inevitably impact upon the human resource capabilities of individual industries across the nation. In asserting this change, we recognise that participatory education requires more from the learner in the form of engaging with the learning tasks and in the development of a personal style of learning which will provide a structure and foundation for life-long learning. In addition, there is the parallel issue of working with the teacher and instructor, to negate the loss of ‘Guru’ status which will come as a personal slight for some of the more established teaching staff. We therefore see the importance of the introduction of ‘train the trainer’ courses, which urgently need to address the issues of altered pedagogical approaches during the change in status from ‘Guru’ to ‘Facilitator of learning’ (Jones 2006). Teachers and instructors will function more as guides to learning, where there must be a high level of participation from all students and trainees (Fairman 2018).

The methodology employed in relation to the development of the ‘student-centred’ approach to learning involves a number of learning activities, including case studies, role-plays, project based learning, problem-solving activities in small groups, peer support and reviewing, coaching and mentoring in work places, small group work, problem identification, action planning, and work simulation or practical action within the real world of work. Trainees will be more participatory and engaging in the whole process of their training. The crucial element here is the designing of vocational interventions that have practical experiences relevant to the world of work, and therefore industry or business involvement is extremely important.

This student-centred approach to learning encourages trainees to practice work simulation and work-related programs at the training workshop as an integral part of the training. In addition, they need to practice their skills and competencies in real work scenarios in the target industry. This requires that every vocational training institution should have a continuous collaboration and partnerships with the relevant industry or companies to allow trainees to undertake practical work (Abdullah 2014b). Compounding this issue in Indonesia is the lack of companies able and willing to accept the trainees for practical work. The following reasons have been advanced for this