



Complementing Quality Education with Sustainable Employment for the Future of Work: An Overview

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ABSTRACT

This paper is an overview of various interventions that have been done to reach the 4th and 8th Sustainable Development Goals which is Quality Education and Decent Work and Economic Growth. The paper highlights issues experienced within the context of Brunei Darussalam such as unemployment. Based on the overview, the objective of the paper is to explore an overview of various interventions that have been conducted on a global, regional, and local scale to analyze how these interventions have been able to assist in realizing the sustainable development goals. Based on the overview, several critical analyses have been made. At the local level, more focus is emphasized on the implementation as well as the evaluation of higher education programme with reference to one higher education programme. At-Tamayyuz Programme is a work-attachment programme which has been recently upgraded to accommodate more collaboration at local, regional, and global level. The programme is a good example of how conventional higher education programmes can advance towards more global partnerships by exposing students to a variety of skills to meet the needs of future of work.

ABSTRAK

Kertas kerja ini adalah gambaran mengenai pelbagai intervensi yang telah dilakukan untuk mencapai Matlamat Pembangunan Lestari ke-4 dan ke-8 iaitu Pendidikan Berkualiti dan Kerja Layak dan Pertumbuhan Ekonomi. Kertas kerja ini menyetengahkan isu-isu yang dialami dalam konteks Negara Brunei Darussalam seperti pengangguran. Berdasarkan gambaran keseluruhan, objektif kertas kerja adalah untuk meneroka gambaran keseluruhan pelbagai intervensi yang telah dijalankan pada skala global, serantau dan tempatan untuk menganalisis bagaimana intervensi ini telah dapat membantu dalam merealisasikan matlamat pembangunan mampan. Berdasarkan gambaran keseluruhan, beberapa analisis kritikal telah dibuat. Di peringkat tempatan, tumpuan lebih diberikan kepada pelaksanaan serta penilaian program pengajian tinggi dengan merujuk kepada satu program pengajian tinggi. Program At-Tamayyuz ialah program lampiran kerja yang telah dinaik taraf baru-baru ini untuk menampung lebih banyak kerjasama di peringkat tempatan, serantau dan global. Program ini adalah contoh yang baik tentang bagaimana program pendidikan tinggi konvensional boleh maju ke arah lebih perkongsian global dengan mendedahkan pelajar kepada pelbagai kemahiran untuk memenuhi keperluan masa depan pekerjaan.

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Introduction

Brunei Darussalam is currently faced with the issue of unemployment since 2010 in which statistics have shown that Brunei is ranked one amongst the highest of ASEAN states to be facing the issue with an unemployment rate of over 80% as recorded by the International Labor Organization (2019). Brunei's unemployment rate rose to 9.3 percent in 2017 from 6.9 percent in 2014, data from the Department of Statistics, Department of Economic Planning and Development (2019) indicated. A recent Labor Force Survey showed the number of unemployed persons in Brunei Darussalam was at its highest in 2018 and decreased slightly in the year 2019 with the latest figure recorded as 8,255 unemployed male and 7,423 unemployed female (JPKE, 2019). The rate of unemployment has decreased slightly to 6% for male and 8.3% for female. However, according to recent reports in the ASEAN post (2020), the rate of unemployment still records quite high according to the International Monetary Fund country report (2019) which is a source of concern for the country's economic health and its continuous dependence upon oil and gas sector.

Several initiatives have been introduced and emphasized at the global, regional and national level which have endeavored to counter the problem of unemployment by launching and introducing several programmes and courses by way of outsourcing online courses to expert groups, collaborative and partnership efforts between schools and ministries, apprenticeship programmes, integrated cumulative grading systems within education curriculums, bridging programmes among others. These programmes are also in line with the 4th Sustainable Development Goals and the 8th Sustainable Development Goals under the United Nations initiatives to address global problems.

Global interventions

The United Nation's Sustainable Development Goals offer 17 goals to address various global issues prevalent across the globe. The issue of unemployment falls under the 4th and 8th goals. The 4th goal is "quality education" which is to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. The 8th goal is decent work and economic growth which is to promote inclusive and sustainable economic growth, full and productive employment and decent work for all. (Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G., & Woelm, F.; 2021).

In line with the 4th goal, the World Economic Forum have identified will be in demand for the future of work. With reference to Global Skills Report (2020), Coursera analyzes critical skills needed around the globe and creates new pathways for them to develop long-term growth. Coursera is one of the most well-known online platforms that help universities and organizations to up skill learners with online content. This content includes 4 levels of growth: cutting-edge, competitive, emerging and lagging. A bird's eye view of the report show a majority of core nations fall under cutting edge category whereas semi-periphery and periphery nations fall under the lagging category. The Global Skills Index has been classed as a global benchmark for skills proficiency and trends.

In response to the 8th goal, McKinsey Global Institute offers various research and insights on the following topics: diversity, sustainability, social responsibility including a media center and alumni community. McKinsey Global Institute helps organizations across private, public and social sectors manage change by adapting to the industrial revolution and building sustainable skills (McKinsey Global Institute, n.d). A non-profit organization under McKinsey called Generation is another intervention that focuses on achieving the 8th SDG.

Most recently, the World Bank launched a Human Capital project in 2018 in which prompted them to come up with a Human Capital Index 2021 in response to the COVID-19 pandemic. The index is aimed at measuring the productivity of humans in terms of investigating trends of successes and analytical work on the utilization of human capital with particular emphasis on the outcome of education and healthcare (World Bank, 2021).

Regional interventions

From a regional perspective, Malaysia implements SLIM, a programme which was developed in 2011 to address the issue of unemployment among Malaysian graduates. It is targeted for groups especially graduates that are unemployed and coming from the low income families. It also targets graduates that are currently working with a low salary scale which is not in line with their degree level. The programme, therefore, provides soft skills training and on-the-job training as stated according to the official SLIM website. The SLIM Programme has been used as a source for best practices for other countries to address the same issue. However, recent studies show that there is still low perception towards the reality of gaining confidence in acquiring the employability skills needed from the said program (Puad, M. H. M., & Desa, H. M; 2020).

Malaysia also implements an integrated Cumulative Point System within higher education programmes which integrates relevant skills within the curriculum. The skills covered under the iCGPA system are knowledge, practical skills, social skills and responsibility, ethics and values, communication, problem-solving,

information management, and entrepreneurship. Majid, F.A (2019) confirmed a potential gap between three main aspects namely; iCGPA, IR4.0 and graduate employability. The implications include the need to revisit the existing curriculum in complementing the training needs of IR4.0 skills, to re-skill lecturers in their teaching approaches and to examine the implementation of iCGPA as a platform to indicate IR4.0 skills and to promote graduate employability.

Local interventions

Local interventions under the industrial sector in Brunei Darussalam show that among some of the initiatives to address the 8th Sustainable Development Goal, Brunei implements an iReady Apprenticeship Scheme to address the issue of employability and unemployment. Under the umbrella of Ministry of Energy, the 3 year apprenticeship Scheme is basically a platform that aims to allocate unemployed graduates to various industries in both the public and private sector. The host organization has the option to permanently employ the apprentice at any time. The ministry website explains that throughout the 3 year programme, the apprentice will be monitored by the respective host organization to ensure their development meets industry needs. The Government will provide a monthly allowance of \$800, for a maximum period of 3 years (BD Voluntary National Review Report, 2020. Pg. 57).

Both SL1M and iReady are similar schemes and initiatives by the government to combat the issue of unemployment but does not focus specifically in providing a learning and training platform to address the skills gap between the transition from higher education into the industry. Some shortcomings can be highlighted as follows: the Institute for Research and Development of Policy (IRDP) in Malaysia stated that audit reports showed a substantial sum of RM27.25 million revenue was poorly managed. In addition to inefficient governance, the implementation of the programme was also seen as ineffective with no mechanisms for monitoring the effectiveness of the programmes, raising question marks on the measures used to achieve each of the programme objectives outlined. In addition, management involving financial, administrative, regulatory and monitoring issues involving non-government-linked companies (GLCs) was also too lenient which eventually leads to the leakage of government revenue and misconduct involving several parties (Anuar, 2019).

Likewise, in the context of Brunei, authorities under the Manpower Planning and Employment Council also reportedly alleged some discrepancies in the i-Ready Apprenticeship Scheme such as interns still complaining of a mismatch between qualifications and job posts, while some alleged exploitations of i-Ready trainees with a recent report of only 37% of the 2,484 i-Ready trainees managed to secure permanent jobs, while seven have started their own businesses. With a total of 892 active i-Ready interns accommodating temporary posts within the government, the minister said \$26.1 million has been allocated for the i-Ready programme in the 2020/2021 financial year, up from \$17 million in the previous year. This questions the feasibility of the programme in the long term as some interns are still unremittingly dependent upon the \$800 without gaining the relevant skills they need to adapt to the job (Haris, 2020).

On the other hand, Brunei Darussalam addresses the 4th Sustainable Development Goal under the Ministry of Education by adopting a ‘whole nation approach’ by strategizing a unified pathway starting from education and training until entering the workforce. At the post-secondary non-tertiary level, the government has developed an Artisan Bridging Programme which is catered for the TVET institution to build technical skills. At the secondary level, the Ministry of Education have developed STEP which is Science, Technology and Environment Partnership which provides skills development in Science, Technology, Engineering, Art and Mathematics subjects also known as STEAM subjects ((BD Voluntary National Review Report, 2020. Pg. 33). The report also mentions of continuous and quality professional development programmes to build teacher capacity which is evaluated in terms of teacher performance appraisal. Further to this SAT is used in secondary education to measure students’ achievements and learning.

Brunei Darussalam also has two relatively new TVET institutions under the Ministry of Education, namely Institute of Brunei Technical Education (IBTE) and Politeknik Brunei (PB), the Ministry of Education has already laid the foundations for preparing highly competitive and skilled graduates. According to the TVET Platform for South East Asia, the TVET system in Brunei has shifted from supply-driven approach towards a demand-driven approach.

Despite such initiatives, a recent collaborative effort between Politeknik Brunei and Hengyi Industries Sdn Bhd failed to resolve the issue of employability of their graduates due to a mismatch in skills of Politeknik graduates with the actual work skills of Hengyi Industries, a recent Oil Refinery industry established in Brunei Darussalam in 2019. Following a recent impromptu visit by the Monarch, it was reported that the company grew skeptical and dismissive of local competency. Instead of hiring local workforce to fill in several vacant posts, they hired expatriates to fill in the vacant posts. The number of posts that were replaced with foreign workers amounted to 1000 posts which showed that local youth employability is still not yet at par with the work skills required by Hengyi (Othman, A. 2021).

As such, it can be seen that the majority of programmes being implemented by government and semi-government institutions are being outsourced to regional and global partners. While it is a good initiative to collaborate regionally and globally, it is also important to note that higher education institutions also play an important role in facilitating similar programmes. As such, it will enable higher education institutions to produce graduates that are more synchronized with the needs of the industry. Although most companies will opt to outsource training for their existing employees as outsourcing corporate training outweighs the benefits of in-house training. Conversely, this training can also be integrated with relevant programmes offered by higher education institutions that can provide skilled as well as learned graduates without the need to be trained. In America, companies are reported to spend 8-10% of their employee budget on training with an expenditure of over \$100 billion on their employees per year and recent studies noted a lack of empirical data to determine the success and impact of these programs (Cukier, 2020). In Brunei Darussalam, the government also invests significantly in in-service training for their employees. The government is currently attempting to cut back on costs on this particular scheme due to budget constraints. The programme in which the government outsources their employees to are mostly degree programmes at both undergraduate and postgraduate level. This further reiterates the issue of unemployment caused due to a mismatch in the skills and knowledge of employees. A number of government officials have experience and skills but are underqualified. On the other hand, unemployed youth have the relevant qualifications but they do not have enough relevant work skills to be competent within the workforce. Nonetheless, youth in Brunei have a better potential to be employed within both government and semi-government sectors with the knowledge and qualifications that they possess. It is just a matter of upgrading their skills in order for them to become more employable for the future of work in Brunei. At the tertiary level, more work needs to be done to upgrade and match these programmes to meet the needs of the industry. One particular programme that will be focused on in this study is the Tamayyuz Programme.

At-Tamayyuz: a Higher Education Programme

At-Tamayyuz Programme is one example of a collaborative work-based learning programme which was launched in 2019. The objective of the programme is to produce graduates with holistic skills, to expose them to local and global work experience, enhance communication skills, inculcate within the 21st Century Skills via activation and broadening collaborative efforts with other universities via a number of memorandum of agreement. The various categories of the programme involve: Study Abroad Programme, Student Exchange Programme, Internship Programme and Community Outreach Programme. The programme is still relatively new and has not been evaluated yet based on its impact on graduate employability.

According to Shaker, A.F (2020), the word Tamayyuz has a deeper meaning in the sense that it looks at the process of variety which accommodate distinction and growth which is learnt by not just understanding the reality of something through mere reflection or thought but through the direct existence and experience of it. Shaker, A.F (2020) further exonerates the root of the word Tamayyuz refers to the interrelatedness between attributing terms to relative root which is derived from an absolute root. The word Tamayyuz means distinction and related to the word Mumayyiz which is the distinguishing factor. The word Mumayyiz is further traced to the essence of human creation in which man is developed in combination of *Rahul Tamayyiz* and *Ruhul Hayya*. Therefore, it can be said that the distinguishing factor in this sense lies within *Ruhul Tamayyiz*. According to (Salleh, S, 2020), *Ruhul Tamayyiz* looks at the spiritual as well as the physical development of man in three categories which is the development of the heart (*qalb*) and the its underlying subsidiaries: the intellect (*aql*) and the desire (*nafs*). The interrelatedness of these three features in man plays a significant role towards the development of a man with particular emphasis on the heart.

The emphasis on the role of the heart (*qalb*) in relation to this study is due to the fact that the future of work has reported that the advent of artificial intelligence will replace the labor market in three aspects as previously mentioned within the literature: people, work environment and task. It has already been observed in previous studies that human can be replaced by the artificial intelligence with respect to their 'aql' and 'nafs'. With respect to their 'aql', studies have shown that artificial intelligence can acquire and accommodate more data and information that the human mind more efficiently and effectively (Monarch, R.M; 2021). It refers to the well-known term 'Big Data' in which colossal amounts of data can be stored and used for various purposes such as research and marketing in various disciplines (medical, academia, business). Artificial intelligence can also override man in the sense that it does not have 'nafs' therefore does not tire in its work nor does it require medical treatments. However, the artificial intelligence is still unable to supersede man in terms of the 'qalb'(heart) in which man uses the heart for the purpose of converting information and data into applied knowledge. In a recent report to rethink 'flawed' Online Safety Bill, senior engineers and research scientists have said that they do not yet have a model AI that is able to reduce a majority of the threats towards integrity of online content particularly in sensitive areas. Studies have also confirmed the issues associated with Artificial Intelligence and content moderation as a challenge due to an absence of humanistic features to capture

the absolute complexity and nuances of an interaction (Llansó, E. J., 2020; Gorwa, R., Binns, R., & Katzenbach, C., 2020) This is where ethics officers come into play in which the moderation between right and wrong can be discerned and regulated by the heart of man as an actor of Islamic-based Development.

Conclusion

Brunei Darussalam has one of the highest unemployment rate within Asia. Brunei Darussalam has responded to the 4th Sustainable Development Goal by implementing a plethora of programmes. The performance of teachers are reported to be assessed regularly but the report lacks any mention of how the education programmes are assessed and evaluated in terms of its impact on youth employability. There is also mention of global collaborative efforts, however lacks specific details on what have actually been done and what the impacts of these actions are. Brunei Darussalam has also responded to the 8th Sustainable Development Goal by ensuring job security and continuous efforts on job creation. In order to ensure job security, the i-Ready Programme was implemented. However, several discrepancies were noted to occur under the programme prompting a dependency culture and ensuring only a temporary fix. In terms of job creation, institutes such as MPEC and DARE have helped to develop skills of existing employees by outsourcing skills development courses and programmes. However, the issue of outsourcing as mentioned in the literature is unsustainable and costly in the long-term.

The above literature shows that there are many existing programmes that have been implemented to counter the issue of employability. Various stakeholders in Brunei from government to semi-government to private sectors have developed numerous programmes aiming to develop the skills of youth in Brunei. However, there is still a lack of proper networking between the stakeholders concerned especially between industry and higher education institutions. The proliferation of skills development programmes among various random stakeholders without a suitable strategy on collaboration and evaluation on its impact may end in fruitless results as the issue of employability depends on the outcome and objectives of such programmes. With the rapid changes within the industrial revolution, it is important to continuously evaluate and assess the impact of such programmes to ascertain that the programmes achieve the right outcomes and objectives and that youth will gain significant benefit from it. An objective-based method should also be implemented with the right objectives and priorities set according to the context of the society will ensure a fruitful result. Furthermore, much of the existing programmes that are launched focus too much on TVET students with a lack of focus on the role of students specializing in Islamic Knowledge. The at-Tamayyuz Programme is a recent imitative under the Sultan Sharif Ali Islamic University which aims to upgrade the employability of graduates by collaborating with regional and global partners in the quest to expose their students to an existing work environment outside of the classroom as well as inculcate them with the right skills and values they need to adapt to the needs of future of work.

References

- Anuar, A (23 July 2019) *Have SLIM objectives been achieved?* Retrieved from <https://www.malaysiakini.com/letters/485107>
- Cukier, W. (2020). *Return on investment: Industry leadership on up skilling and reskilling their workforce.* Public Policy Forum.
- Coursera (2020) *Global Skills Index.* www.coursera.org
- Department of Economic Planning and Development (2019). *Brunei Darussalam Key Indicators.* Retrieved from: http://www.deps.gov.bn/DEPD%20Documents%20Library/DOS/BDKI/BDKI_2019.pdf. Accessed on 22/07/2020.
- Gorwa, R., Binns, R., & Katzenbach, C. (2020). Algorithmic content moderation: technical and political challenges in the automation of platform governance. *Big Data & Society*, 7(1), 2053951719897945.
- Haris, N (11 March 2020) *Govt probes alleged exploitation of i-Ready trainees.* Retrieved from: <https://thescoop.co/2020/03/11/govt-probes-alleged-exploitation-of-i-ready-trainees/>
- The TVET Platform for Southeast Asia:* Brunei Darussalam. Retrieved from: <https://sea-vet.net/brunei>. Accessed on 3/2/2021.
- Khan, A, U (22 July 2020) *Brunei's Youth Facing Unemployment.* The ASEAN Post. Retrieved from: <https://theaseanpost.com/article/bruneis-youth-facing-unemployment>. Accessed on 22/07/2020.
- Llansó, E. J. (2020). No amount of “AI” in content moderation will solve filtering’s prior-restraint problem. *Big Data & Society*, 7(1), 2053951720920686.
- McKinsey Quarterly (2019) *Tech for the greater good.* Retrieved from: <https://www.mckinsey.com/Featured-Insights/Future-of-Work/Five-Fifty-Tech-for-the-greater-good?cid=fivefifty-eml-alt-mkq->

mck&hlkid=e1b5b2d7ffc940cf9933a6e4bf659a6a&hctky=11513937&hdpid=f430955b-2ec1-417b-82e5-33649d768d09 (Accessed on January 2020)

- Mckinsey Quarterly (2020) Retrieved from: <https://www.mckinsey.com/business-functions/mckinsey-analytics/our-insights/confronting-the-risks-of-artificial-intelligence> (Accessed on 8/2/2020)
- Ministry of Finance and Economy (June 2020) 2020 *United Nations High Level Political Forum on Sustainable Development: Voluntary National Review Report of Brunei Darussalam*. Sustainable Development Goals.
- Monarch, R. M. (2021). *Human-in-the-Loop Machine Learning: Active learning and annotation for human-centered AI*. Simon and Schuster.
- Othman, A. (3 February 2021) *His Majesty visits PB, IBTE campuses*. Retrieved from <https://borneobulletin.com.bn/his-majesty-visits-pb-ibte-campuses-2/>
- Puad, M. H. M., & Desa, H. M. (2020). Dissecting perceptions of new graduates on work orientation and self-confidence in employability skills training program. *Universal Journal of Educational Research*, 8(1), 70-75.
- Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G., & Woelm, F. (2021). *Sustainable Development Report 2020: The Sustainable Development Goals and Covid-19 Includes the SDG Index and Dashboards*. Cambridge University Press.
- Salleh, Muhammad Syukri. (2019). Revisiting Contemporary Islamic Values. *Researchers World: Journal of Arts, Science and Commerce*. X. 38. 10.18843/rwjasc/v10i4/05.
- Salleh, M.S (2021) *Tujuh Prinsip Pembangunan Berteraskan Islam: Cetaklan Kedua* (e-book): ISDEV, USM: Malaysia.
- Shaker, A.F. (2020) *Modernity, Civilization and the Return of History*. McGill University, Montreal. Vernon Press. Retrieved from: https://books.google.com.bn/books?id=xEXZDwAAQBAJ&pg=PA193&lpg=PA193&dq=tamayyuz+meaning&source=bl&ots=oJvwEf5VU_&sig=ACfU3U3ET1R0JoW43K7ZSNYifg9LIId-rzw&hl=en&sa=X&ved=2ahUKEwj2iKC65rmzAhWbP3AKHftIAScQ6AF6BAGQEAM#v=onepage&q=tamayyuz%20meaning&f=false
- World Bank. (2021). *The Human Capital Index 2020 Update: Human Capital in the Time of COVID-19*.

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