Education Development Trust

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ASEAN Education Policy and Market Evaluation

Technical Report:
Part Two: Country Profiles
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Abbreviations and Acronyms

ALS	Alternative Learning System
ASEAN	Association of Southeast Asian Nations
CHED	Commission on Higher Education (Philippines)
DAC	Development Assistance Committee
EDT	Education Development Trust
ELT	English Language Training
GE	General Education
GIZ	German Corporation for International Cooperation GmbH
HE	Higher Education
HEI	Higher Education Institution
IES	International Education Strategy (UK)
IQTS	International Qualified Teacher Status
K-12	Kindergarten to 12th grade education (compulsory basic education)
MICs	Middle Income Countries
MOECRT	Ministry of Education, Culture, Research and Technology (Indonesia)
MORA	Ministry of Religious Affairs (Indonesia)
NEET	Not in Employment, Education or Training
NFE	Non formal Education
ODA	Official Development Assistance
OECD	The Organisation for Economic Cooperation and Development
PISA	Programme for International Student Assessment
SEND	Special Educational Needs and Disability
STEM	Science, Technology, Engineering and Mathematics
TESDA	Technical Education and Skills Development Authority (Philippines)
TNE	Transnational Education
TVET	Technical and Vocational Education and Training
UKABC	UK ASEAN Business Council
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNICEF	United Nations International Children's Fund

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Introduction

1.1 Whilst the ASEAN Economic Community is a single bloc with free trade on most goods and services between the nations. It is not monolithic. As shown in the table below. There are significant differences in population size, geography, main religions practiced, the size and nature of the economy, languages spoken; and the ethnic and cultural composition of the population.

1.2 There are also differences in education, in government and parental attitudes to spending, differences in government educational policy and priorities, in attitudes to foreign Investment, infrastructure and market maturity.

1.3 To answer the research questions set for the study, we looked at each country individually and in detail and then drew out the commonalities before arriving at conclusions.

1.4 This paper presents the detailed evidence we used to arrive at the conclusions presented in part one.

Country Snapshot

Country	**Income level**	**HDI Rank**	**GDP per capita**	**Ease of doing business rank** here	**PISA Rank (2022)** [1]	**Main religion**
Indonesia	Lower Middle	114 (high)	4,348.6	73	69	87% Muslim
Malaysia	Middle Income	62 (high)	11,399.7	12	55	60% Muslim
Philippines	Lower middle	116 (high)	3,552.5	95	77	90% Christian
Thailand	Upper middle	66 (very high)	7,645.3	21	63	95% Buddhist
Viet Nam	Lower middle	115 (high)	3,674.4	70	34	90% Folk religion[2]

[1] Singapore was first in the region and first globally. Despite a good score for Viet Nam, it represents a significant drop from its previous position of 21st in 2015 and 12th in 2012.

[2] Iindigenous religion with unique ethnic customs characterized by Vietnamese Gods worshiping and venerating.

Country	Context
Indonesia	The world's largest island country composed of over 17.5k islands. 4th most populous country in the world; home to 300 ethnic groups who speak over 300 different languages. Largest Islamic population in the world. Largest country and economy in SEA. Economy is strong, growing, and expected to reach USD 100 billion by 2025. Its tech start-up scene is fuelling a dynamic and growing digital economy. Manufacturing accounts for about 18% of GDP, 15% of the labour force, and is the focus of the government's 4IR roadmap.
Malaysia	Divided into two geographical sections: West Malaysia, bordering Thailand and East Malaysia on the island of Borneo. Its economy has grown significantly, although income inequality is high. COVID has had a major impact on Malaysia's economy which is export-led. A regional and global hub for the knowledge economy, with an excellent business environment and strong entrepreneurship sector. only 28% of Malaysia's workforce is classified as "high-skilled," and more than half of all Malaysian jobs are at high risk of displacement by technology in the next two decades.
Philippines	Consists of around 7,100 islands and over 170 languages are used across the country. Highly vulnerable to natural disasters and has had one of the worst COVID outbreaks in the region. Steady growth with an increasing GDP over the past ten years. Not translating into job creation in the domestic economy. Overrepresentation of women in low-skilled and low-income positions is a concern. Only one in two women of working age is in the workforce, even though women are overall better educated than men. Women's share of industry jobs has been declining, and they hold fewer managerial or decision-making roles compared to ten years ago.
Thailand	Never colonized by a European country. Education system has developed indigenously. It has made notable economic progress although this has slowed recently. Military coups have hindered prospects of Thailand becoming a stable democracy. The Thai government has invested heavily in infrastructure and efforts to raise foreign investment and exports. Major improvements are needed to bring the country's education system in line with international standards. Not only do Thai students' scores on assessments of science and mathematics sit well below global averages, the gap between the quality of education in rural and urban areas is wide. A severe lack of skilled workers, especially technical specialists and vocational school graduates, and a population that is aging much faster than regional competitors will make it difficult for the country to find enough workers to fill the needs of its evolving industries
Viet Nam	Over 53 ethnic minorities that make up around 14% of the population. Experienced significant population and economic growth; relatively unscathed by the COVID pandemic due to proactive government measures to contain the virus. Vietnam's economy has transformed dramatically over the past three decades and is currently a thriving, globally connected middle-income country. The country's exceptional education system outperforms comparable countries in the region and even scores higher than the OECD country average. Most Vietnamese workers (74%) are employed in low-skill jobs, and youth unemployment is high. Many university graduates cannot find a job that uses their degree.

Indonesia Country Profile

1.0 Context

1.1 A middle-income country consisting of over 17,000 islands. It is the largest archipelagic state in the world. With a population of 280 million, Indonesia is the 4th most populous state in the world and the country with the largest Muslim population. An ethnically diverse country with over 13,000 distinct indigenous groups. The Javanese are the largest ethnic group (40%) and politically dominant.

1.2 The spread of the population is uneven throughout the archipelago, with varying habitats and levels of development ranging from the megacity of Jakarta to uncontacted peoples in Irian Jaya. Eastern Indonesia is generally more under develop and there Is known as the 3T zone (frontier, outermost and underdeveloped.

1.3 Administratively there are several levels of subdivisions.

- The first level are Provinces, which have a legislature (Dewan Perwakilan Rakyat Daerah, DPRD) and an elected Governor. There are currently 38 provinces.
- The second level are Districts (kabupaten) or Cities (Kota), led by a Mayor (Walikota) or Regent (Bupati) and a legislature (DPRDK)
- The third level are the sub districts (Kecamatan), and the fourth are the villages (desa)

1.4 Indonesian (Bahasa Indonesia) is the national language and is very widely spoken. It is the language of instruction in schools. There are over 300 other languages spoken.

1.5 A mixed economy in which the private sector and government play vital roles. It is the only G20 member state in Southeast Asia with the largest economy in the region and 16th largest economy in the World by nominal GDP.

1.6 Professional services firm PricewaterhouseCoopers projects that Indonesia will grow into the world's fourth-largest economy by 2050 overtaking Japan, Germany, Brazil, and Russia. This is partially based on demographic trends that will increase the country's population to about 321 million. It's estimated that 70 percent of the population will be working-age adults by 2030, a circumstance that will supply the nation with a beneficial demographic structure and a voluminous labour pool.

1.7 Internet (digital) penetration rate is around 74% (2022) and 82.84 (2023). According to the World Bank Indonesia has one of the fastest growing digital economies here

1.8 Education and human development are central to the Indonesian government's overall development agenda and providing the skills to fully participate in Industry 4.0. The Government is aiming to add 57 million skilled workers to the economy by 2030. Education reform is key to this.

1.9 Indonesia has taken several steps to attract and ease foreign investment in recent years, including in education, and jumped from 132nd in 2010 to 73rd in 2020 in the World Bank Ease of Doing Business ranking.

1.10 The Government has signed several free trade agreements as an independent market as well as a member of the Association of Southeast Asian Nations (ASEAN). These trade agreements provide Indonesian consumers and businesses with improved market access for goods and services, new technologies, and investment opportunities, including in Education.

1.11 In 2021, the largest merchandise trade partner of Indonesia was China, representing 23.2% of its exports and 28.7% of its imports. 11.2% of Indonesia's exports and 5.8% of Indonesia's imports by value were traded with the United States, its second largest trade partner. Other significant trade partners were Japan; Singapore; Malaysia; India; the Republic of Korea; Thailand; Australia; and Taiwan, China

1.12 Indonesia is a member of several multilateral organisations, including the United Nations, World Trade Organization, G20. It is a founding member of the Non-Aligned Movement, Association of Southeast Asian Nations, East Asia Summit, D-8 and the Organisation of Islamic Cooperation.

1.13 Indonesia has signed several free trade agreements as an independent market as well as a member of the ASEAN. These provide improved market access for goods and services, modern technologies, and investment opportunities, including in Education. An example is the Indonesia–Australia Comprehensive Economic Partnership Agreement (IA-CEPA) 2020, which specifically increased the quota for Indonesians seeking vocational training in Australia and led the way for Monash University to set up a branch campus in Jakarta. This makes Australia a strong competitor to UK engagement in education in the country.

1.14 Attitudes to the UK are generally positive. Attitudes to the UK are generally positive. According to a 2013 BBC World Service Poll, 65% of Indonesians view the United Kingdom's influence positively, with only 15% expressing a negative view. Many Indonesia know the UK for Premier League Football (Manchester United) the Union Jack (often painted on transport) and Margaret Thatcher.

1.15 The UK is not currently a major trade partner with Indonesia. In 2021, the largest merchandise trade partner of Indonesia was China, followed by the United States. Other significant partners were Japan; Singapore; Malaysia; India; the Republic of Korea; Thailand and Australia. UK exports and imports accounted for less than 1% of the total according to Statistics Indonesia (BPS: 2023).

1.16 The environment is increasingly favourable for the UK. A Joint Economic and Trade Committee (JETCO) was signed in July 2022 to help grow trade between the two countries. Education services were mentioned in the agreement along with the recognition of UK qualification as a market access barrier.

1.17 The educational commitments agreed are: educational collaboration in international mobility and exchange between the UK and Indonesia, identifying and develop trans-national education partnerships with Indonesian counterparts and improve English Language Training (ELT) capability for Indonesian teachers. The committee aims to renew the 2016 Memorandum of Understanding on Education.

1.18 The UK is, one of the top five contributors of ODA to Education to Indonesia, but the overall percentage is low. Out of a total of GBP 182,281,420 flowing through ODA for education in 2023, the UK contributed £ 1,747,468, which was just under 1%. The top five contributors were as follows:

Table 2: Top Five Donors in Indonesian Education

Donor	Germany	Japan	Korea	France	UK
Amount	£ 139,213, 338	£ 17,346,132	£ 4,676,295	£ 3,065, 404	£ 1,747,468
Main activity	Vocational and Higher Education	Primary and secondary education Vocational education. Teacher training	Higher Education	Higher Education	Advanced Technical and managerial training

OECD Creditor Reporting System (2023)

1.19 Indonesia's education system is the 4th largest in the world with 3.9% of the world's student population. Education was decentralized in 1999 and there are several different players. The main players include the central government with responsibility for policy development and overall quality improvement direction and strategy and districts responsible for establishing and maintaining schools, hiring teachers, managing educational facilities and the delivery of education services such as curriculum implementation, teacher training, student enrolment, and monitoring educational outcomes.

1.20 There are two streams for education in Indonesia. Secular education and religious education.

- Secular education is managed by the MOECRT and accounts for around 84% of K-12 provision and 70% of HE provision.
- Religious education by the Department of Religious affairs (MORA) and accounts for 16% of K-12 education and 30% of HE. Religious education remains centralized. All authority remains with MORA.

1.21 Within both secular and religious streams, there is a significant private sector, which increases with education level. Whilst 10% of primary schools are private, 50% of secondary schools and 90% of higher education institutions are. Private education institutions are often run by religious foundations such as Muhammadiyah or Nahdlatul

Ulama[3]. Other large actors in private education and education development are Foundations such as Sampoerna (here) and Tanoto (here).

1.22 Government expenditure on education is increasing. In 2023, the budget for education amounted to £ 30,910,597,325.98, which was a 5.8% increase from the previous year. Most of the public financing to the education sector comes from the central government, but two-thirds of education spending is managed by subnational governments—provinces and districts. It is estimated that households continue to contribute 20% of the overall amount spent on education.

1.23 There are challenges to access the education market in Indonesia which should be considered by UK firms and institutions looking to engage. According to the 'Investing in ASEAN webinars held by BDO in November 2023, this includes (a) only 49% foreign ownership is permitted (b) English, although increasing, is still not widely spoken fluently and (c) a government policy that does not allow for-profit education service provision.

2.0 Higher Education

2.1 Whilst the demand for Higher Education has increased by over 200% since 2000, supply has not kept pace with demand. The Government is looking to increase enrolment to Higher Education from 36% in 2023 to 60% by 2045 but the World Bank (2020) predicts his is unlikely to happen because of issues with supply.

2.2 Private HEI outnumber public HEI quite substantially as shown in the table below, providing a greater potential market.

HEI Type		2012		2018		Growth
		#	%	#	%	%
Public	Secular	60	56%	79	55%	31%
	Religious	47	44%	65	45%	38%
	Total	107		144		34%
Private	Secular	1,858	83%	2,042	74%	10%
	Religious	375	17%	714	26%	90%
	Total	2,233		2,756		23%
Overall	Secular	1,918	82%	2,121	73%	10%
	Religious	422	18%	779	27%	84%
	Total	2,340		2,900		24%

2.3 Higher Education gets less than 5% of the total government spending on education. Public spending is estimated to represent only 25% of total spending on tertiary education. Campaign discussions in the recent presidential elections (February 2024) suggested that this may be reduced even further as HEI are expected to be self-funding.

[3] These are major Islamic non-government organizations in Indonesia.

2.4 Quality remains at the lower end. Only Universitas Indonesia (UI) made the Times Higher Education World University 2021 Rankings, where it was ranked 801st out of 1,000. Five universities appear in other international rankings. All ranked universities are public institutions, illustrating the fact that quality challenges are most severe in the larger private sector.

2.5 Labour surveys suggest a serious mismatch between the profile of graduates and the needs of employers as revealed by the latest available results (2018). Employers report that graduates are lacking industrial training and key competencies such as communication (including poor command of English), creativity, critical thinking, and problem-solving skills

2.6 While females enrol in tertiary education at slightly higher rates than males (51.5%), they tend not to enrol in STEM faculties (science, technology, math and engineering). For example, the national representation of female students in faculties of engineering is only around 25%. (Higher Education Statistics 2019).

2.7 Recognising that foreign investment is integral to improving the quality of tertiary education, the Government took steps in 2020[4] to increase autonomy for Indonesian Higher Education Institutions and eased restrictions on market access for overseas institutions. This has opened new opportunities for foreign engagement.

2.8 Opportunities include (a) establishing an in-country education facility through a partnership with a local institution or (b) setting up a branch campus independently. The potential is for universities to charge tuition more than £25,000 per person per year of study. Blended learning and distance learning is also permissible under current regulations, with fewer restrictions on this model.

2.9 Other opportunities for TNE include attracting more Indonesian students to study in the UK. Indonesia's overall student outbound mobility ratio is small. Only 0.57% of Indonesia's tertiary students' study overseas. Of this, only 5% come to the UK. Increasing the number of mobile students is in keeping with Indonesia[5] and UK policy and the JETCO agreement.

2.10 The UK already has a history of joint programmes to build on. Previous TNE programmes in Indonesia have been established but they are quite small. However, data from a

[4] The Freedom to Learn–Freedom Campus policy (2020) gives accredited higher education institutions (both public and private) the right to open new programs without prior approval from the ministry and opens the door for international accreditation and gives much more autonomy to higher education institutions and Ministerial Decree No. 53/2018 and Education Ministerial Decree No. 7/2020

[5] The government supports study abroad by Indonesian students through the Indonesia Endowment Fund for Education, abbreviated as LPDP, managed by the Ministry of Finance. LPDP provides full-ride scholarships and short-term exchange programs for all Indonesian citizen in partnership with the Ministry of Education and Culture, Ministry of Religious Affairs, and other government entities. The LPDP service program consists of scholarships, research funding, and fund management (investment). Since 2013, about 29,872 students have been funded by LPDP scholarships. In 2022, the Indonesian government endowed LPDP with about IDR 99.1 trillion. LPDP is looking to expand its offering through cost-sharing programs with international universities, internship programs, and expanded short-term exchanges for students and young professional.

British Council study (2018) here showed that there was little TNE activity in Indonesia overall compared to other ASEAN countries, so opportunities remain. However, the same study also suggested there were challenges with TNE programmes with students finding different teaching and learning approaches difficult.

2.11 Consultations with Indonesian stakeholders confirm that Indonesian universities are very enthusiastic about the possibilities of internationalisation. One of the eight main performance indicators of higher education institutions in Indonesia is to have world class collaboration programs, so there is a demand Is a requirement for Indonesian universities Several of those consulted were already collaborating with foreign institutions from the US, Australia, and the UK. Higher education in the UK is very well regarded. UK universities are recognized as centres of excellence in various fields, particularly health and pure sciences.

2.12 The consultations highlighted several areas, where the UK could provide support. This mostly included research collaboration. Other areas mentioned were community engagement, student mobility, conference collaboration, joint programmes for students on psychology, mental health[6], STEM subjects. Stakeholders in general felt that TNE would elevate the reputation of Indonesian higher education, increased public trust in our educational offerings, and a demonstrable improvement in the competence of both students and lecturers.

2.13 Another area frequently mentioned (which is not a potential TNE programme but is worth mentioning as a clear stated demand) was English Language training for lecturers. Many felt that they may be missing the latest research and thinking in their field as research was usually published in English. Primary concerns were about funding and Indonesian universities being able to pay.

2.14 The main competitor in Higher Education is Australia. Australia is the number one destination for Indonesian students with 20% of mobile students going there. Monash University was the first foreign university to establish a branch campus in Indonesia, having been granted a license to operate by the Ministry of Education and Culture in November 2020 offering Masters' degrees and doctorates, as well as executive programs and micro-credentials. The campus is in southwest Jakarta (here). Three more Australian Universities (Western Sydney, Deakin and Central Queensland universities) announced in July 2023 that they will set up campuses in Indonesia and have received permission. The Department for Foreign Affairs and Trade (DFAT) also has a very popular scholarship programme for Indonesians to study in Australia. here.

[6] A hot topic in Indonesia at the present time.

3.0 Technical, Vocational Education and Training

3.1 TVET is available at upper secondary level upon successful completion of lower secondary school (grade 9) as an option to continue in the academic stream and at tertiary level, upon successful completion of upper secondary (age 18). This section focusses on tertiary level (equivalent to UK level 5 and above).

3.2 Students can pursue higher studies by enrolling in year- long Diploma Certificates (DI-DIV equivalent to bachelor's degree). Graduates can continue on the professional track to specialist I and II (Sp.1 and Sp.2, equivalent to a master's degree).

3.3 TVET is managed by the Ministry of Education, Culture, Research and Technology (MoECRT) through the Directorate of Technical and Vocational Education (DTVE), which is responsible for designing and developing the vocational curriculum in consultation with the Ministry of Manpower and Transmigration (MoMT) and Ministry of Industries (MOI). It is difficult to find out how much the Government spend on TVET education.

3.4 Funding for public TVET is a joint responsibility between the government through the MoEC and other education stakeholders, such as, local governments (20% Regional budget contribution) past 5 years. Private TVET institutions are independently financed; funding depends on the type of ownership (individual, faith-based, non-governmental organization, and partnership). Private schools may charge fees from students to run the institution (TVET, Indonesia, UNESCO 2020a) It is difficult to get a value on them

3.5 The overall TVET market is quite small. It is not a popular option at tertiary level, catering for only around 23% of the total tertiary student population. The market only grew by around 1% between 2018 and 2022 and in the educational year 2022 – 2023 the number of students declined from 5.39 million to 5 million.

3.6 As with Higher Education, there is a large private sector provision in TVET. Of 1,357 TVET tertiary level providers in Indonesia, 1,034 (86%) are private academies.

TVET Institutions

Tertiary Level	**2022/23**
Polytechnics	44 (all public)
BLK	279 (all public)
Private Academies	1,034

3.7 TVET offers a range of programmes, 71,000 programs covering 144 occupations according to the World Bank. SEA-VET estimates that 60% of enrolment is for a few major competencies namely: computer and network engineering; accounting; business, light vehicle engineering; engineering machinery; motor vehicle engineering; multimedia; marketing; and engineering cooler. The most popular are ICT and business. The Government is encouraging TVET to focus on six priority areas: Tourism, maritime

programmes, food security, creative industries, energy, and construction (TVET Indonesia, UNESCO 2020).

3.8 The quality of TVET is not high. Employers in Indonesia report that graduates are lacking not only industrial technical training but also key work competencies such as communication skills (including poor command of English), creativity, critical and those required for the future for IR 4.0. Companies even think that TVET graduates are below those who hold qualifications from HEI and they are often reluctant to take on graduates from TVET.

3.9 The TVET system is large, complex, fragmented and facing several challenges. Many TVET teachers do not meet the required qualifications in accordance with the Law No 14 of 2005[6] and No 74 of 2008 about teachers and lecturers. Several lack industry experience and certification that makes them incompetent in their fields of teaching. Infrastructural facilities including training equipment are inadequate, obsolete, and, oftentimes, not in line with the new and changing requirements of the industry. Therefore, they are not able to simulate real work environments in classrooms,

3.10 The Government is aiming to add fifty-seven million skilled workers to the economy by 2030 and the "Making Indonesia 4.0 Road Map'' is the government's strategy to prepare the country to become a global "top 10 economy" by 2030. The current vocation system cannot produce these. Therefore, TVET is high on the political agenda. TVET is undergoing a nationwide "revitalization. TVET is also currently a focus of international donors to Indonesia. Of the GBP 182,281,420 ODA received in 2023, GBP 113,006,605 (62%) was purposed for TVET. Most of this from Germany (98%).

3.11 Revitalization efforts[7] include (a) opening access for foreign support (TVET is subject to the same 2018 regulations as HE as detailed in HE), (b) the linking of TVET schools to private businesses and industries (c) the synchronization of TVET curricula (d) the development of learning resources that are oriented toward "4IR competencies and (e) developing new approaches to continuous learning, upskilling, and credentialing, such as micro credentials. These offer opportunities for UK engagement.

3.12 The focus of 'Making Indonesia 4.0 road map' is the manufacturing industry and in particular food and beverages, textiles and textile products, chemicals, electronics, and the automotive industry. Other priority skill areas mentioned by the Government include tourism, maritime programmes, food security, creative industries, energy, and construction, textiles .

3.13 The Indonesian government has also invited business leaders to play an expanded role in shaping the curriculum, developing learning resources and setting skill standards relevant to the demands of the job market. These business representatives are expected to provide internship opportunities and on-site training programs for both

[7] Revitalization efforts are primarily directed at Secondary level TVET.

students and teachers. There may be opportunities for UK vocational schools or employers to partner with Indonesian vocational schools to support the development of curriculum and establish a presence in Indonesia.

3.14 There is a gender imbalance in TVET at secondary level in 2023 with 57.42% students being male across private and state providers (54.95% in state and 59.89%in private schools). As with HE, even fewer females enrol in STEM or technical subjects. These are seen as traditionally male.

3.15 Data available from Indonesia does not explicitly accommodate the equity issue in TVET, namely related to equal access of various other vulnerable groups, but it is likely to be in line with general education with main issues relating to socioeconomic status and location.

3.16 Although this focus on TVET offers opportunities for engagement, the UK does not have a long history of TVET support to Indonesia and access to the market may be challenging. However, the recent Skills for Prosperity project, implemented with the ILO, successfully evaluated a number of solutions, which could potentially be built on. This included a focus on one priority skill area (Maritime) and creating partnerships with UK Institutions.

3.17 Consultations with local stakeholders suggest there is not much scope for general UK support to TVET. The Skills for Prosperity project was not well known. Interviews with ILO staff working in Indonesia suggest that the UK focus on niche areas where there is a need and where the UK has a comparative edge, especially gender and safeguarding.

3.18 There are several strong competitors in the TVET Market. This includes Germany, Korea, Japan and the Netherlands. Of the GBP 113,006,605 ODA purposed for TVET in 2023, GBP 111,476,627 (98%) came from Germany. The Government has also specifically stated in policies that it is looking to these countries for support in the revitalization efforts.

3.19 Indonesia's vocational education sector is now open to foreign investment of up to 49% and the Government is currently seeking to partner with foreign education experts and governments (especially from Australia, Korea and the Netherlands) to improve the quality of its vocational education.

4.0 International Schools

4.1 There is a large private education sector in Indonesia. Whilst state educational institutions dominate the education system (particularly at primary and junior secondary levels[8]) the private sector plays a significant role, accounting for around 48 percent of all schools, 31 percent of all students, and 38 percent of all teachers.

[8] While only 12% of public primary schools are private, the shares increase to 42% in junior secondary and 51% in senior secondary.

4.2 The "private" education system is dominated by religiously oriented schools that tend to be community-based nonprofits that are in fact "non-public" rather than "private" in a commercial sense, as well as by institutions of higher education.

4.3 Within the private sector, there is a group of privately commercially run 'international schools. Defined as (1) private schools that are hosted by a foreign country or (2) locally run private schools (often run by foundations) that use an international curriculum. Some national plus schools[9] are included in the second group.

4.4 The Ministry of Education has oversight of international schools. There are challenges around Government and lack of clarity over what is an international school and what is not. In 2015, following concerns over quality, the Education Ministry issued a regulation that said:

- all international schools (not run by embassies) must remove *international* from their name.
- must include Indonesian culture and learning of the national language into the school syllabus.
- Indonesian students at these schools are required to study several additional subjects and participate in the same national examinations as students at state public schools.
- Both local and expatriate teachers must have at least five years of qualified teaching experience and must be proficient in Bahasa Indonesia. These qualifications are necessary to teach Indonesian related subjects to international school students.

4.5 International schools cannot be fully owned by foreign stakeholders with the new law stating that foreigners could only own 49% of any school. As a result of this regulation, many schools underwent a name change such as the US Jakarta International School (JIS) becoming the Jakarta Intercultural School and the British International School (BIS) becoming the British School Jakarta (BSJ). This means it is often difficult to determine which schools offer an international education and which are not, by name only.

4.6 According to the International School Consultancy (ISC) there are 195 registered international schools in Indonesia, the highest of any country in Southeast Asia. This is a 36% (estimated) increase from 2013. The number of students in international schools grew by around 15% from 53,000 in 2013 to 61,000 in 2018. The main market growth was in mid-price range international schools.

4.7 Most of Indonesia's leading international schools are operating at, or near, full capacity, and this does not look likely to change in the future, despite an average annual fee of

[9] refers to a public school in Indonesia that offers education beyond the minimum requirements of the national Indonesian accreditation authorities. It is an unofficial term, undefined by law, regulation or any official body and therefore open to interpretation in practice. Typically national plus schools offer some subjects taught in English rather than in Indonesian, may provide some native English speakers on staff or may offer international curriculum such as from Cambridge International Examinations (CIE) or the International Baccalaureate Organisation (IBO).

GBP 10,902 per year. It is predicted that demand will grow, as parents are willing to pay for private international education to maximize their children's post-graduate opportunities in the country's increasingly globalized economy and the poor performance of the public system.

4.8 There are inevitably equity and inclusion issues. The very nature of international schools (fee paying) mean they only cater for around 0.1% of the total school aged population and these are all from the higher socio-economic groups. All international schools In Indonesia are based in six large cities in three of the Islands (Java, Sumatra and Bali). Although this is a clear gap in the market. There is not a market in the gap.

4.9 The UK has a strong comparative advantage in the international school's market in Indonesia. 53% of all international schools in Indonesia, are British in orientation. 61% of all schools use a British curriculum, (IGCSE and A level). Cambridge international is the most widely used across schools and is highly regarded. 97% use English as a medium of instruction either solely or as one of two or three languages.

4.10 The nearest competitor is the USA with 18% of the market. Other nationalities include Australia, New Zealand and Singapore, which also use English as the main medium of instruction, Korea and Germany and some of these also deliver a British Curriculum.

4.11 This evidence suggests a potentially large commercial market for the UK in the international school's sector in Indonesia. The UK has a clear competitive advantage in a market that is growing. These opportunities include (a) professional firms providing services on assessment or accreditation, quality assurance or inspections for schools following a UK curriculum and/or offering iGCSEs or A levels (b) pre- or in-service training teachers for international schools using a British curriculum and even (c) English language training for teachers in international schools.

4.12 The increase in demand for an international education is likely to result in an increase in demand for teachers to be able to teach an international curriculum. As all teachers in international schools are required to be proficient in both English and Bahas Indonesia, this may increase the demand for the ITQS available from the UK amongst local teachers.

4.13 There may be opportunities for new British International schools. With plans to move the capital city from Jakarta, Java to Nusantara, East Kalimantan in August 2024, there is likely to be demand for international schools as politicians, ambassadors and other diplomats relocate. The UK could also consider establishing international schools in areas where there is currently no supply (Eastern Indonesia) but as these are the poorer more remote areas of Indonesia, there is likely to be little to no demand.

4.14 There are some potential challenges in setting up an international school (market access). International schools that are not un by embassies need Government approval and are expected to meet the Government regulations around the curriculum (described above) and cannot be fully foreign owned.

5.0 Teacher Training

5.1 Teacher training is a huge market in Indonesia. More than 3.3 million teachers work in classrooms every day. Almost 100, 000 new teachers are required annually to replace those who retire or leave the job and to cover increasing student numbers.

5.2 Teacher Education is manged under the Directorate for Teacher Professional Education, Directorate General of Teachers and Education Personnel of the Ministry of Education and Culture and Technology here and MORA.

5.3 The public teacher education system (both in-service and pre-service) has undergone several reforms since 2005. The 2005 Teachers Law stipulated that all teachers are required to have a four-year university degree (S1) or four years of higher education (D4) and then obtain a teacher certification (PPG). To obtain the PPG certification, teachers complete an additional one-year professional training program and pass a competency test, administered by the Government at the end. Teacher candidates with subject teaching expertise who graduated from universities specializing in teacher education are required to complete 18 to 20 credit hours of training focused on professional competency development for the PPG. Teacher candidates holding a university degree from a general university are required to complete 36 to 40 credit hours of training focused on pedagogical competency development.

5.4 The need for a certificate applied to all new teachers graduating after 2005 but also all existing teachers were expected to complete the certification. Teachers with a certification would be eligible for a professional allowance known as TPG (Tunjangan Profesi Guru).

5.5 The reforms have successfully resulted in a fourfold increase in the demand for teacher training courses. They have also increased the percentage of teachers in schools with a degree from 37% in 2006 to 90% in 2018. This has resulted in an oversupply of teachers.

5.6 The supply of good quality teachers has not improved. RISE (2020) found that the Indonesian teacher training system continues to provide an oversupply of certified but poorly trained teachers with limited subject matter knowledge and inadequate pedagogical skills. As a result, student learning outcomes remain low. PISA data shows that Indonesian students perform poorly and are not improving. Reading literacy in PISA 2020 was at the same level as in 2000 (OECD, 2020).

5.7 There are recognised weakness in the teacher training system, both pre and in service. With regards to preservice,, although raining lasts 4 years, it is not until the seventh semester that students conduct teaching practice (practicum) at schools. This is very late. The PPG is also now online training.

5.8 There are striking gender differences in the education workforce. There are about 40,000 more female teachers than male teachers at the primary level, while there are equal numbers of female and male teachers at the junior secondary and senior secondary levels. There are greater issues in terms of leadership, only around 32% of school principals are female.

5.9 There are regional differences in the distribution of teachers by education level and these are pronounced. Java has the highest rate of qualified and capable teachers in the country due to the preference of teacher candidates for working in urban areas. Other areas, particularly in the eastern part of Indonesia, such as Papua or Sulawesi, have issues with teacher availability and competency. As a result, in some cases, teachers may be required to teach subjects outside their field of expertise and learning outcomes are lower. Most of the accredited teacher training institutions are in the main islands of Java and most accredited LPTK are in the main Islands. The government has implemented programs such as the Bachelor of Education in Border, Remote, and Underdeveloped Regions (SM3T) and the Frontline Teachers program (GGD), some teachers simply do not want to be deployed to remote areas.

5.10 Ongoing professional development (in-service training) in provided through school clusters, called teachers working groups. *Kelompok Kerja Guru* (KKG) at primary level, *Musyawarah Guru Mata Pelajaran (MGMP)* at secondary level, and principal working groups *kelompok kerja kepala sekolah* (KKKS). This system is very well established but are not always used to best effect as a means for professional development. Studies have shown that KKG and MGMP are ineffective due to the lack of useful materials, tight teacher schedules, and the costs to transport to group meetings, especially for teachers living in remote areas. In 2017, the Ministry of Education and Culture issued guidelines for the development of the teacher working groups, stressing their role in supporting professional development and the urgent need for them to realize this role. It is not always clear which level of Government is primarily responsible for in service training.

5.11 It is difficult to understand who the main competitors in teacher training are. ODA flows purposed for teacher training have declined from £2,519,123 in 2018 to £1,131,432 in 2023 and come primarily from Australia and Japan. The Indonesian Government is taking more responsibility and willing to fund teacher training activities with MORA recently taking a £ 152 500 000 loan from the World Bank for in service teacher training across religious schools. This demonstrates a willingness to pay for quality improvement.

6.0 Education Technology

6.1 Education technology is a growing industry in Indonesia and is expected to continue to grow. According to the World Bank (2020), the value of the EdTech market in Indonesia was USD 112 million in 2019 and was expected to grow at 24.9% annually.

6.2 In 2006 the Government established a National ICT Council with the flagship programme to advance ICT in education. Since then, initiatives have taken place under

three main pillars: (1) developing the digital skills of teachers and education personnel. For example, the *Pembelajaran Berbasis TIK* (ICT based learning) programme[10] (2) developing free platforms and digital content for teachers, students and the community. For example, the *Rumah Belajar* (Learning house) platform (here) that could be utilized by teachers, students, and the community for free. (3) and facilitating the development of internet network coverage, infrastructure, and practices in collaboration with other ministries (especially with the Ministry of Communication and Information[11]).

6.3 There is a sense that the Government programmes have not been successful and there are issues with many of them. Further the verbal commitment to incorporating digital technology into education has not yet translated into spend. Public spending on IT in the education sector is low compared with other sectors, as well as peer countries (Word Bank: 2020).

6.4 Besides Government initiatives, there has been a sharp increase in in the number of private EdTech providers. As of 2020, there were around sixty compared to 12 in 2012. Some of the key local players in the Indonesian EdTech market include Ruangguru (an interactive e-learning platform for K-12 students), Cakap (a tutoring platform for language learning) and Zenius Education (self-learning materials for K12 students). Global players include Quipper (e-learning, coaching, tutoring and assessment services for K12 students).

6.5 Private EdTech firms offer a wide variety of products and services but aim to (1) help students with learning and upskilling focussing on online learning, test preparation and career development and (2) administration and management-related offerings to help educators with student management, communication and administration.

6.6 There are gaps in the EdTech market. These include (a) a distinct lack of EdTech products and services designed to remove education barriers for students with special educational needs and disabilities (SEND)[12] (b) most products target junior high schools, senior high schools and higher education, with few products in the primary or pre-primary sectors or in technical, vocational education and (c) most products and services focus on technology-related skills such as programming and coding, rather than on traditional subject content, such as Mathematics and Language, which are very weak areas in Indonesian education. In terms of subject offering, mathematics was offer offered by 13% of companies, science 15% and reading by 12%. EdTech provision is also

[10] In July 2023, the Government launched a Teachers as Technology Leaders programme to improve teachers' ICT competence and promote the use of technology in education. It is a small programme only focussing on a few teachers in each of the 38 provinces across Indonesia.

[11] Unlike other countries, the Ministry of Education does not have legislation or policies to improve school or learner connectivity and or have a law or plan for universal internet provision in schools.

[12] Only one provider LexiPal Indonesia was found to have developed Ed Tech to Support students with Special Education Needs and Disabilities (SEND) and this was to support students with dyslexia to read.

inequitable. The Jakarta market has the highest penetration by EdTech firms, and most products focus on markets on Java.

6.7 Although the market is growing there are demand side constraints. These include a low willingness to pay for EdTech amongst customers in Indonesia. Many parents and caregivers generally do not tend to see the need to pay for additional education services. The World Bank (2020) found that fewer than 5% were willing to pay once a platform's free trial period is over.

6.8 Other constraints include a low level of digital literacy among teachers and inertia in adopting technology and the digital divide. While the country has a high internet penetration (77%) with 167 million social media users in January 2023 and a total of 353.8 million active cellular mobile connections, many students in rural areas lack connectivity and many lower-income students lack access to the devices needed to use edtech tools.

6.9 There are also supply-side constraints. These include (a) high marginal costs, to acquire and retain new customers (b) the difficulty of attracting investors due to low profitability and demonstrated impact (c) shortage of qualified talent to develop and maintain products. These constraints have seen a slight reduction in the number of EdTech startups in Indonesia from 31% to 26% (of startups across the ASEAN region) between 2021 and 2022.

6.10 There is low profitability. By 2020 whilst most EdTech companies (89%) were generating revenue, only 29% were making a profit. On average, it was taking 5 years to become profitable.

6.11 Consultations with local stakeholders indicate that, although interested in EdTech, they feel that Indonesia's education system is not well-equipped for quickly scaling up online learning. Others questioned the need for specific EdTech, as there are other ways to share, which can reach large parts of the country, including social media. A survey conducted by MOECRT found that 70% of respondents in primary schools use WhatsApp (WA) groups instead of learning platforms. As stated above, there are many Indonesians with access to smart phones with an estimated 84.8 million of them using WA. (statista.com)

6.12 There are strong international competitors, which have the advantage of proximity and a stronger reputation in the technology field. JICA recently undertook a market analysis looking at the possibility of using Japanese technologies and products across Indonesia, including in Education, in 2021-2. Japan is well known for their technology (especially hardware). Other competitors include Singapore and the USA, both of which are active in the EdTech market in ASEAN.

7.0 Equity, inclusion and safeguarding

7.1 Bullying, shaming and violence in schools is a huge issue in Indonesia. According to data from the Government (here) boys are especially at risk of physical attacks in school, with 24% of boys affected compared to 18% of girls. Girls are more likely to be affected by sexual harassment. Violence is most prevalent in secular elementary schools and junior high schools (SMP), followed by secondary high schools (SMK).

7.2 Some forms of violence, such as corporal punishment by teachers, is considered common practice in Indonesian schools. Teachers lack the knowledge and skills to apply positive classroom management techniques. Teachers also lack the knowledge and skills to recognize and report violence and refer students to services to address any harm they have experienced.

7.3 The MOECRT issued Regulation Number 46 on the Prevention and Handling of Violence in Educational Units in 2023 with the aim of creating safe and comfortable schools without violence (including from teachers). The regulation encourages the formation of Working groups for the Prevention and handling of Violence (*Pencegahan dan Penanganan Kekerasan*) in schools in districts and provinces to address the issues.

7.4 This regulation has not yet been implemented in all areas. Consultations suggest there is a lack of real in-depth understanding of violence at the micro level and a lot more training and awareness raising is needed.

7.5 The Government is also aiming to upskill Guidance and Counselling teachers (and recruit more)to better address bullying issues and are requiring upskilling takes place through the Guidance and Counsellors teachers' cluster. They would like Guidance and counselling teachers to be able to:

- Educate students about bullying (including cyber bullying) by involving them in different activities such as seminars, FGD and the Project for Strengthening the Profile of Pancasila Rahmatan Lil 'Alamiin Students (P5RA [13]).
- Collaborate with external parties, such as the Police, Social Services and School Committees providing education in various bullying prevention activities and ensuring incidents are handled well.

7.6 It is difficult to find data on sexual harassment in Indonesian schools, but a 2019 study by the Australian National University found that Indonesia seems to have little concern for these issues, and little is known about sexual harassment in education. Although official data records a decline in reported incidents, although there is likely widespread under-reporting of the problem.

[13] P5RA is an abbreviation for Project for Strengthening the Profile of Pancasila Rahmatan Lil 'Alamiin Students. This is a program designed to strengthen the profile of Pancasila students and create students who play a role in society as moderate, useful figures amid diverse social life and actively contribute to maintaining the integrity and glory of the Indonesian state and nation.

Malaysia Country Profile

1.0 Context

1.1 Malaysia is a multicultural, multilingual, multi-ethnic society. The country is composed of three major ethnic groups. Indigenous Malaysians, or Bumiputera, which literally translates as "princes of the soil," are numerically dominant—their largest single group, Malays, makes up slightly more than half of the country's population.

1.2 Bumiputera coexist with two large minority communities: Chinese and Indian Malaysians. These communities make up around 23% and 7% of the country's population, respectively.

1.3 Malaysia is one of the most open economies in the world with a trade to GDP ratio averaging over 130% since 2010. Openness to trade and investment has been instrumental in employment creation and income growth, with about 40% of jobs in Malaysia linked to export activities.

1.4 After the Asian financial crisis of 1997-1998, Malaysia's economy has been on an upward trajectory, averaging growth of 5.4% since 2010, and is expected to achieve its transition from an upper middle-income economy to a high-income economy by 2024 (World Bank, 2023).

1.5 The COVID-19 (coronavirus) pandemic has had a major economic impact on Malaysia, particularly on vulnerable households. Having revised its national poverty line in July 2020, 5.6% of Malaysian households are currently living in absolute poverty.

1.6 The Government is focused on addressing the well-being of the poorest 40% of the population ("the bottom 40"). This low-income group remains particularly vulnerable to economic shocks as well as increases in the cost of living and mounting financial obligations.

1.7 Income inequality in Malaysia remains high relative to other East Asian countries but is gradually declining. While income growth for the bottom 40 has outpaced the top 60 over much of the last decade, the absolute gap across income groups has increased, contributing to widespread perceptions of the poor being left behind.

1.8 Following the removal of broad-based subsidies, the Government has gradually moved toward more targeted measures to support the poor and vulnerable, mainly in the form of cash transfers to low-income households.

1.9 Malaysia is one of the countries in the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), a trade block including Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore and Vietnam. The UK joining the block in 2023 meant that the UK has a Free Trade Agreement in place with Malaysia for the first time. CPTPP protects trade digitally, providing opportunity in the EdTech sector.

1.10 To fully realize its human potential and fulfil the country's aspiration of achieving the high-income and developed country status, Malaysia will need to advance further in education, health and nutrition, and social protection outcomes.

1.11 Key priority areas include enhancing the quality of schooling to improve learning outcomes, rethinking nutritional interventions to reduce childhood stunting, and providing adequate social welfare protection for household investments in human capital formation.

1.12 The Malaysian Government has a vision to make the country a global education hub and has encouraged foreign investors to participate in the development of academic and institutional excellence by allowing up to 100% foreign capital investment in the education sector.

1.13 The majority of schools in Malaysia are national public schools with Malay as the language of instruction (N = 5,874 primary), followed by Chinese medium schools (N = 1,301 primary), Tamil schools (N = 527 primary), special education schools (N = 36 primary); and government aided religious schools (N = 43 primary). There are a wide variety of secondary schools, the majority providing general education, with smaller numbers of sports or arts-based specific schools.

1.14 In the latest OECD PISA (2022), Malaysia dropped in scores across all subjects (-32 in Mathematics, -27 in Reading and -21 in science). In mathematics, Malaysia was the 6th most regressed country globally.

2.0 Higher Education

2.1 Enrolment in higher education institutions has been struggling in recent years, with more students choosing to enter the workforce straight out of secondary school opposed to continuing with education.

2.2 The Ministry of Education has sought to encourage more hybrid learning options for students that are flexible and encourage different forms of attendance. Promoting UK institutions with remote offers that are flexible in participation (e.g., would allow students to work and study at flexible times), and/or UK institutions partnering with local universities to offer remote courses, may be a potential avenue for UK institution growth.

2.3 There are nine international universities in Malaysia - four from the UK (Southampton, Nottingham, Reading and Heriot Watt). The biggest competitor in terms of quality is

Australia, with Monash and Curtin University Malaysia campuses both amongst some of the top universities ranked globally. The below table indicates the world ranking for each university and number of students enrolled (using QS World ranking).

University (Malaysia campus)	Latest student enrolment figure	World ranking	Country
Monash	9,199	42	Australia
University of Southampton	2,000	81	UK
University of Nottingham	5,000	158	UK
University of Reading	3,000	169	UK
Curtin University	3,500	213	Australia
Heriot Watt University	2,000	235	UK
Swinburne University	4,000	285	Australia
Xiamen University	40,000	392	China
Royal College of Surgeons in Ireland	>500	No ranking listed	Ireland

2.4 There are overall positive perceptions of British institutions in Malaysia, with Australia on par. Chinese organisations also hold shares in various institutions in the education market, though are lesser competitors when it comes to perceptions of high quality of education.

2.5 The UK is one of the most popular destinations for Malaysian students (UK has 22% of the market share, second to Australia with 26% of the market share). The UK was previously the top destination, but Australia has become more popular in recent years. Interviews indicate that Australian and UK institutions are considered to have the same high standards in terms of quality, therefore the proximity of Australia may be a strong pull for students, making it the UK's biggest competitor. The below table outlines the destination of students studying abroad (top 10 locations).

Rank	Destination	No. students
1	Australia	20,493
2	United Kingdom	13,796
3	Egypt	8,611
4	United States	6,100
5	Indonesia	5,588
6	Taiwan	5,133
7	China	2,792
8	Russia	2,521
9	New Zealand	2,305
10	India	2,175

2.6 Interviews revealed that there is some discontent from local universities who had previously strong relationships with UK-based institutions. when those same universities set up campuses in Malaysia, therefore becoming more direct competitors. Local universities may become reluctant to continue to recommend UK-based universities to those their students (e.g., for students who wish to study in the UK for their Masters). With expansion into Malaysia, consideration on maintaining positive relationships with existing institutions will be important to ensure they continue to promote UK-based universities for those who wish to study overseas.

2.7 Under the Going Global Partnerships Programme, the British Council in Malaysia launched the UK-Malaysia University Consortium in 2022, which is designed to be a flagship initiative that promotes strategic engagement and bilateral cooperation in higher education between its partner universities in the UK and Malaysia.[14]

2.8 In May 2023, the UK and Malaysia signed a memorandum of understanding (MoU) to strengthen cooperation between both countries in higher education. The MoU aims to enhance cooperation in the field of scientific research and talent training between higher education institutions and both countries; the exchange of academic staff, educators, experts and students on programmes that will benefit both parties; and the provision of training platforms for education administrators and educators, including those involved in in-service training. The MoU also covers scholarships for students to pursue tertiary education in the two countries. The MoU is particularly focused on Science, Technology, Engineering and Mathematics, ICT, TVET, online education, lifelong learning and entrepreneurship.

2.9 McKinsey report that, by 2030, there will be an increase in jobs in education, healthcare and financial services. Education will shift from accounting for 7% of the labour market to 9%, Healthcare from 2% to 4%, professional, scientific and technical services will remain at 3%, and finance will remain at 3%. This indicates a need for more students in these degree areas to meet anticipated demand in the next six years.

[14] Members: United Kingdom**:** Cardiff University; Cardiff Metropolitan University; Coventry University; Kings College London; Liverpool John Moores University; Scotland's Rural College; University of Bournemouth; University of Central Lancashire; University of East Anglia; University of Glasgow; University of Gloucestershire; University of Nottingham; University of Portsmouth; University of Suffolk; University of Surrey; University of York. / Malaysia**:** Universiti Kebangsaan Malaysia (UKM); Universiti Malaya (UM); Universiti Malaysia Sarawak (UNIMAS); Universiti Sains Malaysia (USM); International Islamic University Malaysia (IIUM); Islamic Science University of Malaysia (USIM); MARA University of Technology (UiTM); National Defence University of Malaysia (UPNM); Northern University of Malaysia (UUM); Putra University of Malaysia (UPM); Sultan Idris Education University (UPSI); Sultan Zainal Abidin University (UniSZA); Technical University of Malaysia (UTEM); Tun Hussein Onn University of Malaysia (UTHM); University of Malaysia, Kelantan (UMK); University of Malaysia, Pahang (UMP); University of Malaysia, Perlis (UNIMAP); University of Malaysia, Sabah (UMS).

3.0 Technical, Vocational Education and Training

3.1 It is estimated that 60% of jobs that are to be created in Malaysia over the next decade will require TVET-related skills, and the current TVET market is not equipped to deliver what is needed. In September 2022, the Federation of Malaysian Manufacturers (FMM) reported that manufacturing industries, particularly semiconductors and electronics, were facing a critical shortage of highly skilled workers, including engineers and technicians, with an estimated loss of RM50 billion in national income over the previous eight months.

3.2 McKinsey predict that between 3.3-6 million new jobs will be created by 2030 that will require green skills. The biggest increases are expected in the construction and accommodation & food services sectors. In 2022, the Federation of Malaysian Manufacturers reported that the manufacturing sector needs an additional 600,000 foreign workers this year to restore business output to pre-pandemic levels. Nordin Abdul Malek, executive chairman of the Agro-Entrepreneur Institute, stated that the problem of labour shortage in the plantation sector, particularly oil palm, resulted in losses of up to RM10 billion during 2021.

3.3 There is an overall poor perception of TVET in Malaysia, though some smaller, private institutions with specific areas of focus have a better reputation. There may be potential for UK-based providers with expertise in construction, food and accommodation services, engineering and technology to set up TVET institutions, or work with private providers in Malaysia in these spaces to offer courses and/or improve quality.

3.4 Micro-credentials are relatively new to Malaysia (since 2021), which may provide an opportunity for UK institutions who specialise in this area. Currently, Universiti Sains Malaysia (USM) is leading the way in micro-credentials in collaboration with OpenLearning.com. Pedagogical models for micro-credentials may be a particular area where training can be provided from UK institutions to private or public TVET institutions, though it is difficult to assign value to this.

3.5 Malaysian Qualifications Agency (MQA) Framework: MQA has developed a framework for micro-credentials that aligns with industry standards. This framework ensures the credibility and relevance of these credentials in the job market, thereby reinforcing their value and legitimacy as a part of Malaysia's higher education system.

3.6 HRD Corp Micro-credential Initiative: This is the nation's first industry-based micro-credential initiative, which holds the largest repository of courses in the country, covering 10,000 courses across 24 skill areas. It aims to create a substantial number of micro-credential training places for Malaysians. All training courses under this initiative are designed to meet industry standards and adhere to the Guidelines to Good Practices on Micro-credentials set by MQA.

3.7 In 2022, UNESCO Institute for Statistics reported 285,100 students were enrolled in TVET, 44% of which were female.

3.8 A recent study by Khazanah Research Institute (KRI), using the Graduate Tracer Study data collected by the Ministry of Higher Education (MoHE), shows that the outcomes for TVET graduates have improved over the years. Analysis shows that the graduate employment rate (GE) in the TVET sector has increased from 65.5% in 2010 to 87.6% in 2020. From 2012 onwards, the GE rate for TVET graduates has been higher than other graduates from local institutions of higher learning. The percentage of TVET graduates who were still unemployed six months after graduation has also decreased from 34.5% in 2010 to 12.4% in 2020. This rate has been lower than non-TVET graduates since 2012 (2010: 24.5% and 2020: 18%). Among those categorised as "employable", between 2010 and 2020, an average of 75.6% of TVET graduates obtained employment almost immediately after completing their studies. Comparatively, among the non-TVET graduates, only 64% were able to land a job within the same period.

3.9 There is limited international ODA in TVET in Malaysia, with current small-scale funding from the Japan-Malaysia Technical Institute (JMTI) and the German-Malaysian Institute.

4.0 International Schools

4.1 The international schools' market has grown from approximately 60 schools in 2010 to over 180 in 2020 and is expected to reach a value of RM 19 billion (£3.2 billion) by 2026. The market is vulnerable to economic market fluctuations that impact expat presence in Malaysia (e.g., there was a dip in enrolment during the 2018 oil crisis). Most schools follow the British curriculum, though there is not information on the number that are nationally vs internationally owned. Though there has been growth in the market, there is fluctuation in enrolment, and setting up new schools would likely be a high-risk endeavour for UK institutions who do not already have a presence.

4.2 The Association of International Malaysian Schools is a potentially useful partner for small-scale consultancy services to member schools. The membership is still relatively small but growing, and may be open to discussions around school quality, teacher development, safeguarding or other services offered by UK firms. As most international schools in Malaysia have English, as the main language of instruction, with a large proportion offering the British curriculum, UK-based firms are particularly well-suited to providing relevant services compared to other countries.

5.0 Teacher Training

5.1 Teacher training is operated by the Ministry of Education in Malaysia, and interviews have indicated there is limited appetite for funding training from international organisations.

5.2 Independent and international schools would present more opportunities for teacher training services than international schools, though these would be on a smaller scale and not represent a substantial financial value. The Association of International

Malaysian Schools is the only body that has a group of schools and can provide a direct route to multiple schools.

5.3 Common critiques of in-service teacher training in Malaysia related to it being fragmented and 'one-off', and not adhering to the principles of effective teacher professional development.

6.0 Education Technology

6.1 Prior to Covid-19, Ken Research estimated that the Malaysian online learning market would exceed US$2 billion by 2023. It is likely that the market has surpassed this substantially.

6.2 There have been substantial government investments into EdTech for classrooms (such as 4G internet connectivity in schools, virtual learning environments etc.), but teacher uptake and teacher skill in technology use has continued to be a constraining factor in the extent to which EdTech can be fully utilized in a classroom setting.

6.3 Current online teacher training via the government learning platform called *E-Pembelajaran Sektor Awam (EPSA)*, has been criticised due to its lack of alignment with school needs, and teachers being burdened with high administrative workloads. However, there does not appear to be strong appetite for external support in improving these systems and making them more needs focussed. This would also likely be in the form of ODA technical assistance opposed to private entities.

6.4 Higher education likely has the greatest potential in relation to EdTech opportunities. As mentioned above, hybrid or remote learning has been pushed by the government to increase enrolment in higher education institutions. Provision of remote learning that offers flexibility for students to also engage in employment appears to be the direction of travel for a substantial part of the market.

6.5 In regard to private platforms for use outside of schools (e.g., for academic advancement and tutoring etc.), there are many providers entering the market. Many of these platform's link in with the curriculum. One of the areas that appears to be missing is English language-oriented online platforms, though English is incorporated in some of the platforms, it does not appear to be a focus. This could be a gap to be explored by UK providers, either to partner with existing platforms for English language focused learning, or for standalone platforms that can be marketed in Malaysia.

6.6 The Malaysia virtual school market is predicted to continue to grow. The key opportunities in this area are: (1) hybrid learning models; (2) a focus on STEM, with virtual schools specialising in STEM subjects, and (3) leveraging EdTech innovations such as AI and augmented reality. Current market value of virtual schools is estimated at around US$9.5 million but is expected to experience an annual growth rate of 48.99% by 2030, with an estimated market value of US$103.8 million. Current market figures do not provide disaggregation of this market by level of education. As this market becomes

more established, it is likely more disaggregated figures will become available in the future.

6.7 Australian virtual schools are reportedly popular in Malaysia, with some concerns expressed for what this means for the physical school market in country. Virtual schools therefore present a potential opportunity for international providers, but a threat within Malaysia (particularly for physical international schools). Speaking in August 2023 at the IEAA TNE forum in Melbourne, Australia, Mien Wee Cheng, executive director of Sunway International Schools and director, pre-university studies at Sunway College, told the audience that rapid expansion of virtual schools in Malaysia is a concern for physical schools. She indicated that there is a risk that teachers will leave physical schools, resulting in workforce challenges, and students choosing online rather than in-person education.

6.8 There are an increasing number of EdTech startups in Malaysia that have emerged since the Covid-19 pandemic that may present opportunity for foreign investment. These cover a range of platforms such as Pandai (helps students with exam preparation, gamified quizzes and personalised learning) and ReSkills (communication and adult learning skills).

7.0 Equity, inclusion and safeguarding

7.1 There is a general national framework for child protection and safeguarding in Malaysia. The Ministry of Education conducts training either directly or through external providers such as LeapEd, a Malaysian based organisation (link to LeapEd services here).

7.2 Girls typically perform better in schools than boys in Malaysia, as is evident in international assessments such as OECD's PISA and TIMSS.

7.3 Students from rural backgrounds have the poorest outcomes and are more likely to engage in labour at a younger age. Home language spoken is another factor in education performance. A World Bank Study in Malaysia identified that using non-native language in classrooms has a negative impact on mathematics and science scores, particularly for boys. They found non-ethnic Malay students' performance was worse in TIMSS than ethnic Malay students, with language of assessment likely being a factor. Switching from native to non-native language between primary and secondary was found to be a factor.

7.4 According to a 2023 Randstad Employer Brand report, talent gaps are present in AI and automation, which are only likely to grow due to continuing advancements. The growth in these areas has led to a skills gap in Malaysia, with currently limited opportunities for professional development amongst employees in relevant sectors. In the survey, 17 out of 20 employees agreed that upskilling and re-skilling was important to them, but only 24% reported receiving enough training opportunities to effectively do so. The Minister for Human Resources, V Sivakumar, reportedly stated in 2023 that "to remain employed in the next two years, 50% of employees will need to be retrained. With the advent of

Industrial Revolution 4.0, there is an urgent need for us to transform the national workforce into a skilled one to remain relevant." The Ministry of Human Resources, with the Talent Corporation Malaysia, launched the Digital Transformation Acceleration Programme. It is aimed to improve the skills and retrain 900 employees in Malaysia based on industry needs, allowing them to acquire skills and knowledge in mechatronics, electrical and electronic engineering, data analysis and IT.

Philippines Country Profile

1.0 Context

1.1 Philippines is a young and populous country, the second most populous country in ASEAN. population of 116 million in 2022 with 1.4% annual population growth. Philippines has a high youth population compared to many ASEAN countries, 30 million young people between the ages of 10 and 24 account for 28% of the Philippine population.

1.2 The education system is large, in the 2021-2022 school year 28,033,530 learners were enrolled including those in the Alternative Learning System. There are over 60,400 basic education schools. Between 2010 and 2015 domestic funding for education increased by 60% in real terms reaching a high of 3.97% of GDP in 2017 before dropping to 3.58 in 2022

1.3 The UK's Developing Countries Trading Scheme was launched in the Philippines in 2023 and the Philippines hope to secure a Free Trade Arrangement once the country reaches Upper- Middle Income Status. The Philippines has a fast-growing economy with 6% growth expected in 2023 and 59% in 2024.

1.4 Economic growth has not always translated into jobs and there is a national focus on expanding the creation of decent jobs with a particular focus on women, youth, vulnerable groups and poorer regions. There are persistent gender gaps in employment opportunities and labour force participation.

1.5 Both PISA and SEA-PLM show low learning outcomes achieved by the education system. In the 2022 PISA results were broadly the same as in 2018 with a slight decline in results in reading. However, Philippines ranks 77 of the 81 participating countries showing there is much room for improvement.

1.6 There is a strong political and business commitment to improve education outcomes. The Basic Education Development Plan (BEDP 2030) is the first national long-term plan for the education sector. The plan focusses attention on learning recovery, literacy and numeracy and decentralization until 2025. Philippine Business for Education (PBEd) has existing partnership with Australia and USAID with a focus on youth skills

1.7 The US is the largest contributor of ODA to Education in Philippines, followed by Australia. Both countries support projects to improve basic education and capacity in DepEd, Australia's funding is focused on Mindanao. A $60 million 6-year education project (EQUip) is due to commence in June 2014 and will focus on improving equity, quality and pathways in basic education and skills development, with an emphasis on gender responsiveness and innovation. The UK ODA spend form the UK recorded for 2022 is Chevening scholarships for postgraduate study in the UK.

Top ODA donors in Philippines Education

Donor	United States	Australia	Korea	Germany	Japan
Amount	$ 15.349	$11.48	$4.322	$4.155	$3.729
Main activity	Primary education (ABC+ Advancing Basic Education in the Philippines. Higher education	Primary education, teacher training	Higher education, Primary and TVET. Includes capacity building for policy makers in TVET	Higher education, Education Policy and administrative management (TVET)	Higher education and education policy and administrative management

OECD Creditor Reporting System (2023) here. Costs in $ US Millions 2021

1.8 While girls' education isn't a national policy priority there are concerns around dropout and a significant number of girls (and boys) out of school. Korea has been supporting a programme called "Better Life for Girls" (2011-2024) with DepEd which includes the establishment of girls' education centres, development of the ALS curriculum and capacity building for ALS teachers.

1.9 Philippines joined GPE in 2023. Nationally the Second Congressional Commission on Education EDCOM 2 is underway a national assessment and evaluation of the whole Philippine education sector. International partners in this exercise include USAID, British Council and IDInsight and will be an important opportunity for UK engagement.

2.0 Higher Education

2.1 Demand for Higher Education has increased slightly in recent years, the gross enrolment rate rose from 34% in 2020 to 35% in 2023. Enrolment peaked at 40.86% in 2016.

2.2 22,247 international students chose to study in higher education institutions in the Philippines in 2021, the majority (16,000) coming from India and a further 4,000 from China. Most of these students were studying STEM subjects. This is an area of potential growth market for UK qualifications.

2.3 Most tertiary education in the Philippines is provided by private Higher Education Institutions (88% of institutions, 53% of enrolments), they are subject to regulations by the Commission on Higher Education (CHED) and are free to determine their own academic programmes and curricula.

2.4 In 2023 16 Higher Education Institutions featured in the QS list of best Asian universities however supply and quality are uneven and generally not high. A 2023 report from the Philippine Institute for Development Studies found that the training and skills development obtained from higher education is inadequate. Graduate and employers

report local of communication and problem-solving skills, competence and trainability. 65% of graduates are not employed in their sector of choice due to lack of skills.

2.5 Improvement in the quality of HE is a key policy priority and internationalization is seen as an important route to achieve this. There is strong potential for building on current partnerships UK and Philippines universities

2.6 Following a moratorium on TNE programmes between 2012 and 2015, in August 209 the Transnational Higher Education Act was passed which permits foreign universities to provide education services through partnering with a local institution.

2.7 According to the British Council 24 Philippines Institutions offer authorized TNE programmes. The UK already has well regarded TNE programmes. UK education is regarded as high quality and ranks as the 4th highest destination for Filipinos studying overseas. The number of students studying in the UK is small but has increased in recent years, in 2016/2017 there were just 730 students studying in the UK, this has risen to 2480 in 2021/22 the majority of which are undergraduate students. Australia and Canada are the most popular destinations for Filipino students overseas.

2.8 Teachers in the basic education system are encouraged to study for master's degree (both focused on content knowledge and pedagogy) some courses are offered in partnership with Australian Universities. There may be space for qualifications certified by UK institutions in this space.

2.9 Universities are widely engaged in international partnerships and seek international accreditation for programs as a way of showing and improving quality. This includes partnerships that involve harmonization of training content in courses such as nursing to ease international mobility.

2.10 Healthcare based subjects (nursing/medicine/dentistry) have been seen as a route to careers abroad – Filipino healthcare professionals are actively recruited throughout Europe (notably the UK and Germany) this area is now considered a skill shortage in the Philippines.

2.11 Higher Education is also tasked with developing the countries innovation ecosystem and building research competencies. USAID has previously supported programming to build human capital in STEM and create collaboration between universities and industry.

2.12 Internationalisation is seen as a foundation for improving the quality of higher education by CHED. There are opportunities for course development, accreditation and qualification partnerships with Philippines partner universities. There is also potential to attract more Filippino students to the UK and to support institution to offer UK qualifications to foreign students in Philippines.

3.0 Technical, Vocational Education and Training

3.1 TVET is provided at upper secondary and post-secondary (tertiary) level. The Education and Skills Development Authority (TESDA) oversees the area of TVET. TEDSA describes its mission as "TESDA sets direction, promulgates relevant standards, and implements programmes geared towards quality assured and inclusive technical education and skills development and certification systems."

3.2 Demand for TVET has fallen, from a high of 2,151,236 students enrolled in 2016 to 1,260,44 in 2023. Current levels of enrolment are a 1.62% increase from 2021. Around 6% of 15–24-year-olds were enrolled in TVET in 2021, around 1% of the education budget is spent on TVET. According to TESDA data A higher proportion of males are enrolled. 5.31% of females aged 15-24 are enrolled in vocational education compared to 6.68% of males.

3.3 There is a perception that people are not aware of TVET especially at secondary level and TVET is often seen as a second choice to an academic route, particularly at Senior High School level. At this level Technical, Vocational, Livelihood programmes are based on sector demand, student demand and industry alignment. TVET sectors with the highest number of enrolees and graduates are 1) Agriculture, Forestry and Fishery 2) Tourism and 3) Automotive and Land Transportation.

3.4 TVET providers are seen to be performing well – the pass rate is high (91%) and 70% of TVET graduates get jobs within 6 months. A 2021 survey found that employers from a range of sectors are satisfied with TVET graduates although a survey of graduates in the same year found that 63% of graduates reported that they hadn't used the skills they had gained in training. There are concerns that graduates from community-based training modes and not well regulated and that employers do value TVET certifications.

3.5 Alignment with the priorities of Industry 4.0 is a strong TEDSA priority for TVET. In August 2023 TESDA launched the National Technical Education and Skills Development Plan 2023-2028 which aims to create a globally competitive workforce and foster economic growth through skilling, reskilling, and upskilling with a focus on digitalization, area-based and demand driven TVET. There has been a strong uptake of online courses and TESDA is developing and delivering courses delivered online and which make use of VR technologies.

3.6 TESDA has existing partnerships with nations with strong track records and reputation in TVET in consultations the following existing partnerships were mentioned

- South Korea on technology-based competencies and accreditations
- German industry working with TESDA and German-Philippine Chamber of Commerce to provide apprenticeships and cultivate partnerships with the private sector

- Australia has renamed its education team to "Education, Skills and Employment" and is expected to prioritise skill development in the agenda of Australia to the Philippines that is currently under development

3.7 The 'JobStart' programme, supported by Canada and the ADB, is prominent. The project aimed to establish a nationwide Programme where at least 24,000 youth (60% women) are provided with access to gender-sensitive, employment-related life skills training and on the job experience. Philippines has also received a significant loan from ADB to support the updating and modernisation of the TVET system – including improved facilities, training course and upskilling of trainers.

3.8 Consultations showed a lack of knowledge around micro credentials, in 2021, the Technical Education and Skills Development Authority (TESDA) launched the Micro-Credentialing System (MCS) to provide a framework for issuing and recognizing micro-credentials across various sectors which aims to ensure that these certifications meet quality standards and are aligned with industry needs. The use of micro-credentials is particularly evident in the IT and technology sector, where the demand for skilled professionals is high. Employers in this sector are actively seeking candidates with micro-credentials in areas such as cybersecurity, cloud computing, and data analytics.

3.9 The TVET market appears to be limited but there is a significant interest in engagement with industry and employers. Possibilities could include supporting the development of courses aligned with Industry 4.0 online courses, training for TVET tutors and qualification standards.

4.0 International Schools

4.1 International schools are regarded as independent schools and only education institutions that are established to cater to foreign diplomatic personnel and other temporary foreign residents. International schools must be established by legislation or presidential decree.

4.2 The international school market in Philippines in relatively small, there are around 40 international schools catering to around 30,000 students. Most schools are situated in and around Manila. Schools offer a mixture of curriculum included the British curriculum, International Baccalaureate, America, Chinese, Singaporean, German, French and Australian with the IB curriculum the most common. 10 schools currently offer a British curriculum, and some are accredited through Cambridge International schools – for example as a Global Leaders school.

4.3 There is demand for schools with English as the language of instruction and demand for more international schools with many existing schools having long waiting lists. Despite this demand no new international schools have opened recently in Manila, lack of suitable sites for schools is often given as a challenge.

4.4 There is a large and active private school network at all levels of education, 22% of school enrolments are private, at secondary level non-state schools account for 40% of all schools. Non-state input is also present through Education Management Contract where non-state actors manage state schools and through an 'adopt a school' scheme where individuals and organisations agree with DepEd to provide support for a particular school. Students from private schools perform better in PISA but the share of enrolment is decreasing over time.

4.5 Low-fee private schools operating at grades 7-12 are known as Affordable Private Education Centres and several chains of these schools operate. All schools are subject to supervision and regulation by DepEd.

4.6 There are strong working relationships between private schools, DepEd and CHED and schools are engaged in the wider political effort to improve the quality of education and learning and considered partners by DepEd. The Coordinating Council of Private Educational Associations (COCOPEA) is the umbrella organization for all private schools in Philippines and a useful partner. They have lobbied to be permitted to continue to offer blended learning to their students. Private schools procure their own professional development activities for teachers, usually though an inset day structure, schools may also support teachers to gain post-graduate qualifications.

5.0 Teacher Training

5.1 Data from DepEd shows that in the 2020/2021 school year there were a total of 876,842 teachers at all levels of basic education, with the highest number of teachers in Elementary schools.

5.2 The "National Educators Development of the Philippines" office within DepEd is responsible for the national teacher training and development system. The system guides the content of school INSET days, the other stream of work is intended to lead teachers towards obtaining a post graduate degree. State universities and Teacher Education Institutions are engaged in this process they also engage with SEAMO Innotech.

5.3 There has long been a teacher shortage in the public school system and DepEd is committed to recruiting more teachers and non-teaching staff, teacher compensation has increased in recent years, but recruitment targets are not being met.

5.4 Large Scale Technical assistance programmes for teacher professional development and learning funded through the World Bank seem to have been relatively lower profile. This may change with GPE membership opening the education system to more external Technical Assistance support and are likely to build on the USAID Teacher Effectiveness and Competencies Enhancement Project (US$110 million) which began in 2023. An EQUIP programme is due to commence in 2024.

5.5 In consultations teachers have said that they teachers appreciate the online training portals, virtual in-service training, and other platforms provided by DepEd, considering these useful for promotion and professional development. However, these resources pose a challenge for in areas with limited online access and where teachers have limited digital skills..

5.6 English is the primary language of instruction (from grade 5) throughout the education system and is a popular ESL learning destination in the region. Strengthening of the ESL sector and English training for teachers that emphasises English as a skill for communication are potential growth areas. The British Council has existing relationships with ESL and teacher training providers.

5.7 DepEd takes a very positive attitude towards technology and has kept in place learning platforms developed during the covid-19 pandemic and has a large OER library. DepEd has partnered with local EdTech company to provide a virtual labs solution. Current processes for ensuring child safety in digital content are highly resource intensive and this is a potential area for support. Use of EdTech is quite based around software access leaving space for other kinds of EdTech providers. Support and development of teacher and student IT skills is a potential area of required training.

5.8 The teacher professional development system currently places a strong emphasis on post-graduate qualifications and there is space for further development of the in-service teacher and school leader professional development system with the goal of improving learning. A 2019 UNICEF report found that only 10% of teacher reported that they had received training in subject-matter and pedagogical knowledge and skills before entering the classroom.

5.9 Development of quality standards for teacher professional development and perhaps accreditation of courses are potential areas of opportunity. System level opportunities in teacher training the public system are likely to be more ODA focused and require partnerships with actors already active in this space like UNICEF and UNESCO.

5.10 Tutoring is a growing industry and part of the national catch-up strategy post-covid. Public school teachers and universities are expected to provide tutoring although it's unclear what kinds of training and quality assurance is being developed. This could be a potential opportunity for quality assurance and certification as well as training teachers for private tutoring providers.

6.0 Education Technology

6.1 Levels of access to phones and internet in Philippines is unequal but quickly improving – those in rural and remote areas have less access. 14% of students in the poorest households have access to a computer or tablet, while 16% have internet access. 27% of students in rural areas have internet access, compared to 47% on urban areas. Overall,

64% students have access to a smartphone and 55% have to a computer. Quality of access is improving and costs reducing, and Philippines expects to further lower barriers to internet access.

6.2 2019 UIS data monitoring SDG indicator 4.4.1 shows low levels of digital skills – just 5.67% of youth and adults have transferred files between a computer and other device. 0.67% have written a computer programme using a specialized programming language and 2.04 have used basic arithmetic formulae in a spreadsheet.

6.3 According to the International Telecommunication Union (ITU) "The Philippine ICT industry growth is consistent with gross domestic product growth and is expected to continue the positive trend supported by the financial, telecommunication, business process management and healthcare ICT sectors. The Philippine telecommunication industry is a major contributor to the country's economy. Continuous investments in communication equipment contribute to the growth of the ICT industry.

6.4 There is strong government support for technology in education. The K to 12 curriculum states that it aims to produce "graduates equipped with information, media and technology skills, learning and innovation skills, life and career skills, and communication skills necessary to tackle the challenges and take advantage of the opportunities of the 21st Century. Media and information literacy are core subjects in grades 11 and 12. Improving digital skills is also in line with the wider Thailand 4.0 strategy.

6.5 DepEd encourages the use of mobile learning devices, digital textbooks and e-learning platforms to support learning. Digital resources developed during the long covid-19 school closure remain in place and accessible.

6.6 There is a national OER library that targets 'last mile' schools and includes resources from Khan Academy and Wikipedia. The ABC+ Reading project has included the development of digital reading materials in multiple languages. Local firms have partnerships with regional DepEd offices which may have more space for innovation.

6.7 2020 legislation aims to make investment in local ICT more attractive – the "Make it Happen in the Philippines" campaign (developed in partnership with the UK) aims to boost local capacity in electronics, manufacturing, automotive, aerospace, IT and health to encourage international businesses into Philippines.

6.8 Teachers employ various use various digital learning – television, social media, internet, interactive platforms and gamification applications. Digital literacy training for teachers has largely been provided by industry partnership such as Intel® Teach Program, PLDT Info teach Outreach Program, and Microsoft's Partners in Learning Program training has shifted to online and community building approaches.

6.9 Schools have a designated ICT person to support teachers but levels of digital literacy and low and teachers are not confident using edtech in the classroom. UNESCO found that nearly one-third of primary teachers felt on average 'not very' and 'not at all'

confident using ICT in the classroom. A survey commissioned by USAID revealed that, despite over a decade of ICT infrastructure and teacher skill development, most schools were still at the "emerging" and "applying" stages of technology integration, indicating the need for further progress in ICT adoption in Philippine public schools.

6.10 Tracxn have identified 71 EdTech related start-ups in the country – a significant number emerged in the past 5 years, and provide platforms for courses, cloud-based training and assessment, school management systems, and virtual learning solutions.

6.11 Philippines ensures that quality of digital content in terms of child safety, although the centralized quality assurance process is highly resource intensive.

6.12 Applications that teach English are popular and the consumer will pay for services they find useful. Younger Filipinos are open to non-traditional learning formats and qualifications. In 2018 Thailand's 13 million students spent $13 billion on education. High levels of private education may mean there is a market for applications targeted at students.

7.0 Equity, Inclusion and safeguarding

7.1 In consultations the need for government agencies and local government to actively promote the protection and safeguarding of children was mentioned. There is concern around increased numbers of pregnancies among girls aged 10-14 (increased by 11%) according to the 2022/23 data. There is a need for a multisectoral approach here – including the development of Comprehensive Sexual Education and support services.

7.2 There is limited data available around the situation and experience of children with disabilities and education in Philippines. A 2020 study (unpublished) found that 86.7% of teachers surveyed has no formal training in teaching learners with disabilities, concerningly just 30% of schools reported that they have learners with disabilities amongst their students, which suggests significant underreporting and high number of students out of school. Teacher training and specialist support staff including for assessment are needed, as is review of the implementation of existing inclusive education policy.

7.3 Research from UNICEF, ECPAT and INTERPOL shows the concerning extent of abuse and exploitation experienced by children online. Among the key findings were that 55% of children said that they did not know how to report harmful content on social media and 44% that they did not know where to get help if they or a friend were subjected to sexual abuse or harassment. 13% of children surveyed said they had had sexual images shared with them without permission and 13% of children reported that they had been threatened or blackmailed to engage in sexual activities in the last year.

Thailand Country Profile

1.0 Context

1.1 Thailand is often cited as a development success story, moving from a low-income country to an upper-middle income country in less than a generation. Thailand's 20-year National Strategy (2018-2037) sets the national vision to become a developed country with security, prosperity and sustainability. Part of this goal is developing a workforce with the skills required for the 21st century skills – including digital literacy, lifelong learning and ability in STEM fields, to become a highly skilled workforce.

1.2 Thailand 4.0 is the economic plan and framing for this development. As part of this the government has committed to developing the Eastern Economic Corridor (EEC) in the provinces of Chonburi, Royong and Chachoengsao, to be a technology manufacturing and services hub.

1.3 This vision requires investment in the development of a suitably skilled workforce. The government has pledged THB 861 million ($US28 million) to develop human resources in the EEC. This opens opportunities for foreign investment.

1.4 The National Scheme of Education includes an emphasis on improving educational quality and increasing the number of students in vocational schools. The overall vision is that "All Thai people are provided with quality education and engage in lifelong learning as well as live happy lives on the basis of the principles of a sufficiency economy and global changes in the 21st century."

1.5 In 2022 government expenditure on education amounted to approximately THB 455.9 billion ($US 12.9) a decrease from the previous year.

1.6 Thailand scored below the OECD average in the 2022 PISA. Scores in mathematics, reading and science have all decreased since 2018. There has been longstanding national concern around negative trajectories in learning and inequalities of outcomes by gender and socioeconomic status, language and location. Thailand hosts around 90,000 refugees from Myanmar

1.7 Thailand receives relatively small amounts of ODA from DAC donor countries. The UK is the 6th largest donor. Across all donors the highest amount of funding for Higher Education – largely scholarships. Japan's contribution for Higher Education includes in 2022 includes a programme to establish two KOSEN schools delivering Japanese KOSEN education in Thailand. Funding from smaller donors is quite focused around STEM including university partnerships, training projects and course development and is largely spent within the public sector.

Top ODA donors in Thailand

Donor	1 Japan	2 Germany	3 Korea	4 France	5 US
Amount	$ 11,679	$7,437	$3,57	$2,314	$1,637
Main activity	Higher education, lower secondary. Education policy and administration management	Higher education, TVET	Higher education, teacher education	Higher education	Higher education

OECD Creditor Reporting System (2023) here. Costs in $ US Millions 2021

2.0 Higher Education

2.1 The enrolment rate in higher education is high in comparison to other countries in the region at 49.14% in 2023. 1.5 million students were enrolled in 2021. There has been a steady decline in the number of Thai students enrolled in higher education – however there has been an increase in foreign students from China and other neighbouring countries. There were 34,202 foreign students in 2022 mainly in private universities.

2.2 There are approximately 170 higher education institutions in Thailand 70 of which are private. 70% of spending on higher education is public spending. The Ministry of Higher Education, Science, Research and Innovation (MHESI) has oversight of higher education and is very focused on higher education, alongside science and research towards development goals and developing an innovation ecosystem.

2.3 There are equity challenges to access to higher education in Thailand the Office of the National Economic and Social Development Council data shows that students from high-income families have a 65.8% chance of going to college and the number remarkably dropped to 5.3% for students coming from low-income families. Financial burden is evidently the main cause of education inequality. Without education, job opportunity is limited, resulting in the vicious circle of poverty

2.4 Thai universities do not rank well in international ratings, there are 27 universities in the Times World rankings, but none rank higher than 600. Thailand faces a shortage of graduates in STEM subjects and employers have expressed concern about the lack of basic skills graduates hold.

2.5 In May 2017 plans were announced to encourage "high potential" overseas universities to set up branch campuses in Thailand. Since then, two overseas universities (Carnegie Mellon and National Taiwan University). Branch campuses are required to support priority industries identified in the national development strategy.

2.6 Collaborative degree programmes in partnership with UK Universities are offered and involve some time spent by students within the UK. UK institutions make up less than 10%

of these partnerships suggesting that there is strong potential for growth. UK Universities are highly regarded, and Thai students may prefer to study at home, particularly at undergraduate level to enable them to build up local networks. The British Council has an existing guide available for creating UK-Thailand TNE partnerships and are well placed to support in developing future opportunities.

2.7 The UK is a popular destination for Thai students overseas as are Australia, the US and increasingly China. The number of International Students from Thailand studying at HE institutions in the UK is relatively small at 5,405 for the 2021/2022 academic year this is a decline from previous years, in 2016/2017 6,240 students studied in the UK.

2.8 MHESI is enthusiastic about partnerships with all sectors, including private and people sectors and other ministry and there is a strong commitment to improve quality and employability of graduates.

2.9 The Thai Higher Education Policy Council also sees a future in online and hybrid education to increase access. They have suggested that universities should focus their efforts to provide good quality online and hybrid education that will promote multidisciplinary and lifelong learning.

2.10 MHESI also has a Reskill/Upskill/New Skill initiative which offers a range of non-degree programmes focused on skills demanded by target industries. A national MOOC platform has also been developed which provides a wide range of open access courses.

3.0 Technical Vocational Education and Training

3.1 TVET is provided at upper-secondary and tertiary level. The demand for TVET is not high and enrolments have fallen by around 68% since 2016. Providers are split between the public and private sector 447 institutes are private 456 public and 198 dual programmes. Most private sector providers are Thai.

3.2 Technical and Vocational education pathways are not viewed as positively as an academic route. Most teachers and parents do not encourage students to pursue vocational education and link TVET with lower income jobs. Employers are more likely to require a degree for technical positions and previous research has found that many technical graduates work at a lower level than their qualification.

3.3 Enhancing the quality of TVET is among Thailand's priorities related to ensuring economic growth. The national strategy explicitly states that Thailand is looking for international expertise to improve outcomes and programme delivery for trainers and assessors.

3.4 TVET in Thailand has experience of working with industry and the private sector to develop Dual TVET programmes and work-based learning. There is an acknowledge need for accessible adult learning to address skills shortages in the labour market.

3.5 The UK is viewed as particularly strong in digital skills and there is scope to build on previous and existing contracts to develop career orientated business and technology qualifications. Professional development programmes for TVET teachers and trainers, standards and qualifications are all are all potential areas of growth and offer opportunities for UK business and suppliers.

3.6 TVET currently receives technical support bilaterally and multilaterally with assistance from Germany, Japan, Denmark, UNICEF, and UNESCO. This assistance is often in designing curricula for specific industry related training.

3.7 Since the setup of East Economic Corridor (EEC) and the goal of Thailand 4.0, MOE mentioned the importance of internationalize the TVET in Thailand and the necessity of setting up "excellence centres" notably in the EEC region (Rayong and Chonburi). However, there are not much official updates on the progress and some attempts are led by individual schools/institutes, not by the government.

3.8 Due to the general low performance in English in the Basic Education system, most students going into TVET also have low English competency. This can be an opportunity for English language teaching institutes.

3.9 Working abroad is increasingly popular for the young generation. Students and families might be more interested in internationally recognized diploma, especially in the field that in demand in other countries, as this can increase the chance for them finding work abroad. But it should be recognized that TVET candidates are often from a lower socioeconomic background.

4.0 International Schools

4.1 There is an active international school market with potential for growth. International schools are high quality by parents and particularly favoured by those who wish their child to study at an overseas university. The UK has an advantage in language and highly regarded, recognizable qualifications.

4.2 There are approximately 162 international schools in Thailand in 18 different cities. Schools are relatively easy to establish, and the curriculum must be approved by the Ministry, the Office of the Private Education Commission certifies schools.

4.3 Thailand sees international schools as growth market to attract students from across ASEAN. There are plans to offer a visa specifically for parents who have a child at an international school in Thailand.

4.4 A British curriculum is offered in 48 of the 91 international schools around Bangkok, there is some curriculum mixing, for example offering maths and science to the Singapore Curriculum so British curriculum subjects need to continue to be seen as high quality. In consultations the Curriculum and accreditation from the UK were described as high

quality with clarity on what will be learned but flexibility in lesson design. Schools with Chinese and Japanese curriculum opened in 2023.

4.5 The International School Association of Thailand is a strong potential partner and works closely with government. Accreditation of schools by international bodies is promoted by the association and in a competitive market may offer schools a distinguishing feature. A certification alongside inspection of international schools has previously been offered by UK suppliers and could be reinvigorated.

4.6 Schools have challenges recruiting and retaining foreign teachers – international qualifications, professional development opportunities that are recognizable and transferable may be another opportunity.

4.7 In consultations English Programme schools (schools with an intensive English program or bilingual schools) were mentioned with a value of 10 billion THB attached. These schools need services such as teacher training, curriculum design, teacher recruitment and organising enrichment activities to satisfy OBECs requirements.

4.8 Changes in student behaviours post covid mean that many students prefer hybrid learning or exam focused learning which has led to a growth of alternative schools – especially targeting those who wish to study for a degree abroad.

5.0 Teacher Training

5.1 There are currently around 640,000 public sector teachers in Thailand. National professional development programmes for teachers has focused on supporting teachers to take a Master's degree, workshops, knowledge sharing and online training and have been organized centrally.

5.2 Training in the competencies required by the national teaching standards has been provided and there is acknowledgement that the quality of this training could be improved.

5.3 Limited information and data around teacher training is available suggesting that this is a limited market although there may be some opportunity to provide technical support to the Ministry.

6.0 Education Technology

6.1 Thailand has high levels of mobile phone and internet access. 95.3% of the population us a mobile phone and 88% of the population use the internet at home. 90/4% of households have internet access. There is inequality in access 6 out of 10 households have access to internet at home; however, only 3 out of 10 poorest households have internet access compared to universal access among the richest households

6.2 There are variations in school infrastructure. 82 percent of learners attend schools with internet connectivity, however only 62 percent of learners attending disadvantaged schools have access to internet versus 95 percent of learners attending advantaged schools. 77% of students report that they attend a school with an online learning platform.

6.3 The Ministry of Digital Economy and Society and its agencies lead on digital technology and innovation, while the institute for the Promotion of Teaching Science and Technology, under the Ministry of Education, is responsible for most areas of teaching and learning related to science and technology.

6.4 There have been several EdTech initiatives in basic education for teachers, students and schools including the provision of hardware. Television has been used since 1995 to reach over a million students in remote areas with teacher shortages. Steps have been taken to improve access and coding has been integrated into the curriculum

6.5 Private national EdTech firms are key players – Edubook Thailand, SkillLane, FutureSkill, Caliber and Topican Education Group are amongst these and offer a range of EdTech solutions from online courses and digital learning platforms to professional development programs. There has been government investment in the tech sector and startups and growing community of national firms working in EdTech. In consultations it was mentioned that firms struggle to be profitable with K-12 as parents are reluctant to pay, many EdTech startups are focused on business and providing corporate training.

6.6 Teacher skill levels with EdTech are low and EdTech resources are not widely used in schools, in 2023 only 8% of 15-year-old students in Thailand use digital devices for more than one hour a week in the study of mathematics and science.

6.7 In consultations it was discussed that there is limited awareness of micro-credentials in Thailand and there is no current regulation or definition of a micro-credential. Credentials need to be demand driven and specific to a job/profession with employability in mind – for example recognised by employers not just a university. Recent government policy focuses on how to recognise micro-credentials and the creation of a national credit bank. There is a need for standards and regulation. Thai universities see micro-credentials as a potential way to attract new students and are increasingly adopting innovative approaches to learning.

6.8 There is a lack of focus on online child protection. An analysis of the teacher training curriculum shows there is minimal content and focus on child protection online. The Disrupting Harm in Thailand report, conducted by UNICEF, ECPAT and Interpol revealed a severe online exploitation and abuse problem affecting Thai children. An estimated 400,000 children (9%) aged 12-17, became victims of online sexual exploitation and abuse in 2021.

6.9 There may be challenges to market access, current procurement tends to favour national companies and government agencies. It may be better to work in partnership with Thai firms.

6.10 There is currently no education ICT strategy in place – despite recommendations of a UNESCO and OECD joint report in 2017.

7.0 Equity, inclusion and safeguarding

7.1 There are significant concerns around child protection and safeguarding of children and young people in school but also online. Research by UNICEF, ECPAT and INTERPOL found that children and caregivers are not reporting online sexual abuse, between 10 and 31% of children aged 12-17 have experienced online sexual exploitation or abuse in the past year but did not disclose to anyone. 47% of children said that they did not know where to get help if they were being harassed.

7.2 3 cities in Thailand (Bangkok, Khon Kaen, Yala) are members of UNESCO's Global Network of Learning Cities – this programme aims to make lifelong learning a reality at the local level, Khon Kaen is working to develop and 360degree classroom model and support environmental sustainability through a zero-waste school initiative

Viet Nam Country Profile

1.0 Context

1.1 Students in Viet Nam, in the latest OECD PISA assessments (2022), scored close to the OECD average in Mathematics, but below in reading and science. Viet Nam ranked lower than previous assessments, which may be due to schools closing for longer in Viet Nam compared to other OECD countries during the Covid-19 pandemic.

1.2 Viet Nam has been opening its economy since reforms in 1986 and opened the education sector to foreign investors even more in the last 5-10 years, making it easier to partner with and operate education institutions and services. A Free Trade Agreement is in place between the UK and Viet Nam, covering goods, services and investment.

1.3 In 2022, the Minister of Education and Training Nguyen Kim Son and British Secretary of State for Education Nadhim Zahawi agreed to enhance the countries' educational cooperation during a meeting in London on June 29. The two officials discussed many cooperation areas, including digital transformation in tertiary and general education, environmental education, English language training, examination, student exchange, and postgraduate training.

2.0 Higher Education

2.1 Higher Education is a market that has experienced some of the greatest growth and is also the area that is likely to have the greatest opportunity levels for UK businesses. The skills required in the Vietnamese job market are also more tailored to higher education, with digital business, language and global operating skills being two key areas where skill sets are predicted to be required. Growth predictions for the market are currently 15% year over year.

2.2 The increase in tuition fees in private institutions has grown in recent years, which has led to fluctuations in enrolment. International universities based in Viet Nam are faring better due to strong reputations. New regulations in 2018 made it easier for foreign investment into education, which has led to an increase in foreign activity in the sector.

2.3 There are currently 101 joint training programmes between Viet Nam and UK institutions, with two branches of UK universities based in Viet Nam. The British University of Viet Nam has been able to expand and grow due to demand, with a current student population of 3,000 that is expected to grow to 10,000 after expansion. This demand indicates opportunity for UK businesses in the higher education sector.

Number of joint training programmes in Viet Nam by country of provider (international)

Country	Quantity
United Kingdom	101
United States	59
France	53
Australia	37
Republic of Korea	27
Taiwan	18
Malaysia	18
New Zealand	16
Belgium	10
Germany	10
China	10

2.4 Remote learning in Viet Nam has increasingly been considered as an option since the Covid-19 pandemic, and distance learning courses from UK providers may be a potential avenue for UK businesses.

2.5 Though Vietnamese students do travel to the UK for university, countries within the region (particularly Korea and Japan), Australia and the US are currently more popular. Marketing campaigns for British institutions (alongside remote options noted above), may help improve the appeal of UK institutions amongst Vietnamese students.

3.0 Technical Vocational Education and Training

3.1 The law on Vocational Education and Training in 2015 made the Ministry of Labour and Social Affairs (MOLISA) responsible for the national TVET system. Within this ministry, the General Directorate of Vocational Education and Training (GDVET) performed an advisory and implementing role. Viet Nam's National Qualifications Framework Is monitored and evaluated by MOET and MOLISA.

3.2 Between 2010 and 2014 the state budget allocated to vocational training was the equivalent to 2.54 billion (UNESCO, 2018). Capital construction accounted for 40.81% of this budget, with 37.4% on recurrent expenditure and the remaining 21.79% on national target programmes.

3.3 TVET institutions are not free in Viet Nam and there is no regulation regarding fee levels in private institutions. In the public sector, as of 2018, secondary and college education levels were capped at a fee of approximately 5 USD per month. Institutions can, however, add additional charges (e.g., for contributions towards materials). There are exemptions for individuals from low-income families that is compensated by state subsidies, even for those attending private institutions.

3.4 The TVET market is growing in Viet Nam, though there have been fluctuations, and perceptions of the quality of TVET are still low. In some locations, such as Ho Chi Minh City, the first half of 2023 saw an enrolment of only 31% of target capacity in vocational institutions in the city.

3.5 There has been an increase in the number of TVET establishments since 2016, both public and private, though there was a small dip in the number of establishments in 2018 before recovery in 2019. Data is not yet released post-Covid-19, so it is currently unclear what impact the pandemic had on the TVET sector.

Number of vocational education establishments

	2016	2017	2018	2019
Total number of vocational establishments	2,697	3,006	2,957	3,024
No. public	1,465	1,574	1,299	1,441
No. private	1,232	1,432	1,658	1,583

Number of vocational education graduates (public vs private) 2016-2019 (thousands)

	2016	2017	2018	2019
Total number of graduates	1,479.4	1,984	2,100	2,200
No. public	*965.4*	*1,219.6*	*1,350.9*	*1,425.9*
No. private	*514.0*	*692.4*	*749.1*	*774.1*

Number of female teachers in Vietnamese TVET centres (thousands)

	2016	2017	2018	2019
Number of teachers (male)	47.9	56.7	56.2	53.6
Number of teachers (female)	19.8	29.7	30.7	30.7

3.6 The private sector is predominantly (potentially entirely) national private providers, with no data on international providers. There is market potential for international private providers, though this would likely be difficult and would require local partnerships.

3.7 The average monthly income of wage earners with elementary VET qualifications (VND7.84 million or ≈USD340) continued to be better than that of college graduates (VND7.26 million or ≈USD315) and intermediate-level VET graduates (VND6.98 million or ≈USD303).

3.8 The greatest demand for green jobs is reportedly in hospitality and tourism, followed by manufacturing.

3.9 In terms of improving standards and quality, there is little space in the market for UK ODA, as Germany has a large presence in Viet Nam in improving the quality of TVET. However, one area that may be a gap relates to improving gender equity within TVET, as

this is not explicitly covered in the current work around improving quality. Amongst programmes developed by GIZ are programmes focusing on digital literacy and green skills, responsive to government need.

4.0 International Schools

4.1 Over half of international schools in Viet Nam follow a British Curriculum, with the second most popular being IB. Four schools are owned by British organisations, two of which opened in 2023, indicating potential space and demand for more UK organisations to open schools, or partner with schools, in country. Fees range from £1,000 per year to £45,000 per year depending on the school and grade level. The most opportunity is likely in Ha Noi or HCMC, but other localities with an increase in urban population may also provide opportunity.

4.2 Regulations of private institutions, including international schools, comes under the remit of the Ministry of Education and Training (MOET). There is potential opportunity to support in the regulation of private institutions, as this is a perceived area of weakness. Though there is unlikely to be government funding for this, providing technical assistance to develop accountability mechanisms may provide opportunity for UK organisations within this market (e.g., in supporting school inspections etc.).

4.3 Today, there is a mix of independent schools and those run by global international school groups such as Nord Anglia Education, UWC and Cognita in Vietnam. The largest education group in Vietnam is KinderWorld, a Singaporean-based group that owns 15 schools under the brand name of Singapore International School (SIS) in the cities of Hanoi, Ho Chi Minh City, Da Nang, Binh Duong New City, Vung Tau, Nha Trang and Ha Long.

5.0 Teacher Training

5.1 With teacher training provided by MOET and limited mandates for external providers, there are limited opportunities for UK providers in this space. The British Council already have a presence and strong relationship with MOET, and there is limited space for more organisations, particularly as a key focus area for Viet Nam is English language. MOET would likely be open to international input through ODA, but there is limited opportunity for MOET to pay for teacher training directly from UK providers.

5.2 The World Bank funded the Enhanced Teacher Education Program in Viet Nam. The model started with building the capacity of the eight leading teacher training universities and amongst teachers in schools throughout the country. Training was delivered in research, development and innovation; blended teaching that combines in-person and digital methods for lesson delivery; internal quality assurance; and curriculum development and the promotion of new ways of teaching. MOET and the World Bank worked with experts from Australia, Hong Kong, Taiwan and the UK to develop a monitoring tool called "The Teacher Education Institution Development Index". The tools helps to keep track of the quality and effectiveness of training amongst

teacher education institutions. The model also involved direct training with a group of "core teachers", with hybrid learning models and communities of practice. Between 2017 and 2022, one teacher per school (over 30,000 teachers) principals and 600,000 teachers participated. This initiative indicates that ODA might be the most likely opening for teacher training opportunity in Viet Nam.

5.3 The British Council has a history of providing teacher training related to English language in Viet Nam. These are typically smaller scale projects, though there have been some with wider scope. See, for example, this short article on a train the trainer initiative for English language teachers in Viet Nam.

6.0 Education Technology

6.1 Higher education likely provides the greatest opportunity for EdTech, with Covid-19 making remote learning a more appealing option for many students who have increased their technical capacity. Local universities are already offering remote courses, though options are currently not extensive. Technology and engineering degrees and MBAs are currently available online, but there is potential opportunity to expand on offering.

6.2 In 2019, Viet Nam was one of the top 10 fastest growing online education markets globally, and the pace of growth has continued since Covid-19. There are many small-scale EdTech startups, in addition to larger scale national providers. Investment in small-scale startups might provide a good opportunity for market entry. There are several international investors that indicate an open market and demand and willingness to allow foreign investment in national startups (e.g., Singapore-based Sweet Capital recently invested in Teky Alpha JSC, Indonesian Ruangguru recently acquired Mclass etc.).

6.3 In 2019, Viet Nam had more than 100 startups active in the education technology sector. In 2022, the total venture capitalist investment in edtech startups surpassed US$200 million. According to the latest EdTech Agency white paper on EdTech in Viet Nam, EdTech startups in country secured over $400 million in funding from 70 domestic and international private investors as of June 2023.

6.4 K-12 is currently the largest and considered the most promising EdTech market, there are potentially more untapped opportunities in higher education, vocational training and workforce education. There is currently a gap in the integration of practical experience and more hybrid approaches in Viet Nam.

6.5 At preschool level, KidsUp, KiddiHub, Allokiddy and Kids online are all established startups. The most common platforms in this segment are for teaching math, English, STEAM/robotics/programming. Applications developed for this age group require careful content research and investment in appearance, often incorporating gamification elements and featuring direct instruction or 1:1 tutoring with teachers or mentors.

6.6 At general education level there are many platforms. In this segment, most products are learning management platforms (LMS/LCMS), online resources to support review and exam preparation, or foreign language learning applications. The demand for educational technology products in the general education market boomed during the COVID-19 pandemic, and although there have been signs of cooling down, it will remain the biggest market for EdTech in Vietnam in the coming years.

6.7 At higher education level, there are 16 education institutions in Vietnam granting Bas 100% through online training. Duy Tan University has a virtual reality simulation game to encourage group interaction between students.

6.8 The private tutoring market in Viet Nam is vast, and remote tutoring became more popular during Covid-19. Though the market is crowded, there may be opportunity to invest in existing online tutoring services or provide more advanced English and soft skills tutoring.

7.0 Equity, Inclusion and Safeguarding

7.1 Viet Nam was the first country in Asia and the second in the world to ratify the Convention on the Rights of the Child. There are a variety of laws related to children's rights that cover aspects of safeguarding and child protection, though there is space for more specificity. Organisations such as Plan International work in schools on preventing gender-based violence and other areas of child protection. UNICEF focuses on child protection in Viet Nam through child protection systems, protecting children from violence, social work development, child justice and prevention of child exploitation. International schools typically have more robust policies related to safeguarding, though it is likely that these are simply better publicised for international schools than for government schools.

7.2 In a survey of Vietnamese employers, analytical skills (62%) and digital skills (52%) were amongst the top two priorities. Advanced digital skills such as UX Design, AI and machine learning, cloud computing and IoT and cybersecurity were amongst the most valued skills. However, where employees generally consider that employers should be responsible for upskilling workers (58%), 43% of employers believe that the government should be responsible for upskilling the workforce. Barriers to upskilling are typically cited amongst employees as them not understanding what skills are required. Other issues cited for not upskilling includes a lack of time being allocated to upskilling, with the International Labour Organisation estimating that 27% of the country's workforce is overworked. There may be opportunity for UK businesses to work with Vietnamese businesses at how to upskill whilst working. UK apprenticeship schemes may be particularly interesting in the Vietnamese market, though it is unclear what the financial benefit of such schemes would be to UK businesses.

Sub-Regional Profile

1.0 Context

1.1 The five education markets are comparatively and internally diverse and, as the evidence presented above shows, there are varying opportunities and levels within each sector and country. However, there are many commonalities in the challenges, trends in the solutions and therefore, similar opportunities in the education market across the countries, which suggest the UK can adopt a regional approach.

2.0 Higher Education

2.1 Access to higher education has expanded significantly over the past forty years across the five countries, mostly because of economic and demographic changes. An increase in the school age population coupled with an expanding middle class and a rising demand for higher-level skills has led to a growth in gross tertiary education enrolments in the region and it is likely to continue. The market is sizeable presenting several opportunities in internationalisation, student mobility and TNE programmes.

2.2 Quality is a common challenge. Internationalisation is viewed as a substantial stimulus to strengthen the performance of ASEAN HEIs and is a major trend across the region (see table below) with the access to the market and number of programmes rising. Of the five MICS, only Viet Nam has a low level of Internationalisation In 2022.

TNE Trends across the Five Countries

Degree of Internationalisation	**Country**	**Trends**
Medium	Indonesia Malaysia Philippines Thailand	High demand from international students enrolling in HEI Emphasizing education quality Lowering public expenditure Recruitment of international faculty researchers Emphasizing international research-oriented policy Promoting TNE Controlled, limited branch campuses, but which are Increasing
	Viet Nam	Trying to improve education access, equity and quality Under resourced Human and financial capital for international activities Low number of international faculty and staff Promoting academic and student mobility through several Inter-regional activities. Promoting international research-oriented policy (with limited success) More opportunity for private HE

Source: ASEAN 2022 The State of Higher Education in ASEAN here

2.3 Southeast Asian countries have for a long time been characterised as one of the largest exporters of quality students to developed countries. The UK ranks as one of the top 5 destinations in Malaysia, Thailand and Indonesia, but is some way behind Australia, Japan, and the United States, who consistently rank among the top 5 for all ASEAN member states (not only the five focus countries). Between 1990 and 2019, UNESCO reported that outbound internationally mobile students from Viet Nam to the U.S. increased by 1,676% and from Indonesia to Japan by 373%. During the same period, It Increased from Thailand to the UK by 147%,

2.4 Southeast Asia has been a hub for TNE programmes since the late 1990s it is still seen as an important way to improve quality and demand is still high. However, Students report several challenges, mostly related to cultural norms in teaching and learning. Students are not acquainted with the notion of critical thinking. Analysis is absent from the language and cultural frames in some ASEAN societies. Students are also unfamiliar with challenging teachers' authority or contesting textbook knowledge.

2.5 Inter-regional collaboration in Higher Education has also been increasing and with strengthened regional coordination being a key objective of the ASEAN education roadmap of 2023, it may prove competitive in the future.

2.6 According to data from Statista (2022), the number of users of online education platforms in the Southeast Asian market has increased from about 8 million to will continue to rise until 2026, including online university education.

2.7 There are gaps in higher education participation exist based on gender. Males in all five countries are less likely to enrol in university compared to their female peers as shown in the table below

Gross enrolment in Higher Education (data from 2020 unless stated).

Country	Male	Female	Total
Indonesia	33.7%	38.9%	36.3%
Malaysia	37.05%	48.4%	42.5%
Philippines	29.2%	37.5%	33.3%
Thailand	35.7%	49.7%	42.6%
Viet Nam	35.7	49.7%	28.5%

2.8 According to statistics drawn from the UNESCO's World Inequality Database on Education (WIDE) there are other significant gaps in higher education participation and tertiary completion rates exist across Southeast Asian countries based on location and socioeconomic status. Whereby urban and affluent students are more likely to attend, and complete higher education compared to their rural and less wealthy peers. A study by Salmi (2018) found that governments in Southeast Asia do not view equity in higher education as a policy responsibility for them.

3.0 Technical Vocational Education and Training

3.1 The economies in all five countries shifted labour from agriculture to industry and services between 2011 and 2022 with a disproportionately higher share observed in services than in manufacturing. This shift, combined with other megatrends such as globalisation, technological progress (e.g. as Artificial Intelligence, Internet of Things (IoT), robotics, machine learning, and automation), demographic change, migration, climate change as well as unforeseen shocks (e.g., COVID-19) have and will continue to influence the skills that people need for work.

Country	Agriculture			Manufacturing			Services		
	2015	2019	2022	2015	2019	2022	2015	2019	2022
Indonesia	35.06	30.15	29.3	13.45	14.10	21.9	43.84	47.75	48.9
Malaysia	12.58	10.87	10	15.31	17.24	26.1	59.58	61.82	63.9
Philippines	31.06	24.83	22.8	8.29	8.57	18.4	53.28	56.74	58.7
Thailand	38.17	31.55	30.4	14.90	16.45	22.2	40.51	45.41	47.3
Viet Nam	46.54	39.47	33.6	14.35	18.04	30.6	31.88	34.37	35.8

Source:: ASEAN Stats Yearbook (2022)

3.2 Skills imbalances have emerged as a major issue in the labour market across all five countries. Labour surveys of employers suggest shortage of skilled employees and a mismatch between the profile of graduates and the needs of firms and a shortage of skilled employees. This mismatch includes not only specific industrial and skills but also key competencies such as communication skills, creativity, critical thinking, and problem-solving skills as shown in the table below.

3.3 According to a large-scale survey conducted by the World Economic Forum (2019) here with young people in six ASEAN countries, a large proportion of the respondents perceive most lack in their language skills (such as the ability to communicate in multiple languages), advanced digital skills (such as programming and data analytics), and maths and science skills – skill sets that are paramount if a move towards knowledge-based industries is desired. The shortage of graduates from STEM fields and the lack of researchers in some countries is seen as likely to stall the region's innovation and economic growth and development.

3.4 As education Is the source of skills, this has meant that education, and particularly TVET, has become a prominent feature to bridge the skills gap and future proof the economy in all five countries. Yet, TVET seems to be facing more challenges than any other level of education. Common challenges revolve around a lack of infrastructure, equipment, quality programs aligned to needs and quality instructors. TVET education as a whole and TVET career has been shown to be the last career for students.

3.5 The ASEAN work plan on education (here) has a specific outcome for TVET education – trying to make it more responsive to the changing labour market demands - and all five Governments have started to Implement solutions, which include (a) developing more

robust partnerships with private sector actors and (b) developing innovative approaches to learning and credentialing (including micro-credentials and online learning) ensuring they are more accessible to women and other underserved populations (TAF 2020).

Some key initiative currently being implemented

Country	Activity
Indonesia	- TVET (mostly at secondary level) is undergoing a nationwide "revitalization", that includes the linking of schools to businesses and industries the synchronization of curricula, and the development of learning resources that are oriented toward "4IR competencies - Curriculum reform (kurrikulum Merdeka launched in 2022) to "encourage education that produces innovation, to facilitate the students to learn from various sources, to engage in creating and sharing knowledge and experiences, to learn to contextualize their knowledge, innovate with machines and technology, and foster the students' entrepreneurship skills through education
Malaysia	- TVET 4.0, initiative is a framework that will help prepare students for changes and new industries brought about by 4IR. - Another initiative is 2u2i (2 years Uni, 2 years Industry), which provides undergraduates exposure to real working experience through added learning time so they can develop the necessary skills in their respective industries. - Another novel program is CEO@Faculty, which engages top local and international CEOs and industry players to share knowledge, experience, and expertise with students at Malaysia's top universities, as well as provide input to academia to ensure its relevance to industry
Philippines	- The Department of Education plans to partner with businesses in drafting a new education curriculum that is responsive to the needs of the economy and that will "address the demands of tomorrow's jobs, as it incorporates more high-value skills like critical thinking, problem solving, and creativity - TESDA is also looking ahead towards upgrading its training regulations and programs with the proliferation of 4IR technologies in mind. Its medium-term (2018-2022) development plan specifically identifies as one of its core objectives the "[preparation of] the Philippine workforce for the challenges posed by the 4IR."120 At its third National Quality Technical- Vocational Education and Training (TVET) forum, themed "Driving Quality Assurance in TVET in the Fourth Industrial Revolution," TESDA Secretary Isidro Lapeña said, "In recognition of the emerging 4IR, the changing skill sets of the 21st century and Science, Technology, Engineering and Mathematics have to be integrated in TVET, which plays an important role in the 4IR to equip the youth/learners of today for jobs in the future here.
Thailand	- Budgeted US$1 billion for 12,290 doctoral researchers to serve the country's development and staffing needs over the next 20 years

	- Addressing the country's gender disparities in STEM education by partnering with UNESCO To promote STEM education among girls and women through UNESCO's Global STEM and Gender Advancement project (SAGA). - Working to overcome prejudice around TVET. Set a goal of 50% of tertiary level students to enrol in TVET. - 2017 established Thai MOOC open source edX framework, allows people to enrol remotely in short-term courses and earn certificates that are recognized by Thai universities - Public private partnerships to develop short term courses to train workers to develop skills that match the demands of industries that are targeted for growth e.g. automotive and in specific locations (e.g. the Eastern economic corridor).
Viet Nam	- Improving the TVET system. Strengthened legal and policy framework, greater flexibility (with the addition of vocational training at the college level), and higher quality of training, based on parameters such as skills standards, curriculum frameworks, and pilot learner assessments. - Private sector led skills training in collaboration with international companies. E.g. Vinfast has established its own vocational training centre in Haiphong city that will teach mechatronics and industrial mechanics to Vietnamese students. Upon completing the program, students receive a certification based on German standards, enabling them to work at the Vinfast factory or at more than 50,000 German companies worldwide

Source: TAF 2020:

3. 6 The lower percentage of young females than males enrolling in TVET is a common challenge across all five countries. As is the even lower enrolment in technical areas, which are seen traditionally as male.

Young women enrolled in TVET

Country	TVET	Technical areas
Indonesia	38.5%	12%
Malaysia	44%	26%
Philippines	45.2%	18%
Thailand	39.2%	15%
Viet Nam	23%	5%

Source: UNESCO; International Centre for Technical and Vocational and Education

3.7 The results of the Skills for Prosperity project in three of the countries suggest there is scope for establishing partnerships between TVET providers in the UK and in the five countries. This project has provided the UK with an entry point and lessons from the project should be used.

4.0 Teacher Training

4.1 As the country level analysis shows, core numeracy and literacy outcomes across all five markets are (except Viet Nam) are below OECD averages. This is exacerbated by

inequality. All 5 Governments emphasize STEM, 21st Century Skills, and digital literacy to support economic growth and most countries are struggling to deliver this adequately across the curriculum.

4.2 All countries continue to focus on improving the quality of teachers to improve learning outcomes. Country level reforms are increasing the attractiveness of the profession and the teacher training market but are not resulting in better teachers or learning outcomes.

4.3 Efforts Include curricular reform. At least two countries have recently reformed their school curriculum (Viet Nam and Indonesia) to make it more relevant. Two other countries (Philippines and Malayasia) are planning to do so soon. This will generate challenges for teachers and the need to update initial teacher training courses and upskill in service teachers through professional development. There may be niche market areas, which align to UK strengths and areas of interest. There may also be the possibility of supporting the development of online in-service teacher training modules in some countries, but this needs further investigation.

4.4 However, it is unlikely that there are large commercial opportunities for the UK to engage in teacher training within the public education system and for the ITQS. It remains an area mostly for large ODA investment from countries such as the USA, Japan and Australia and for programmes that align with the national agenda rather than being based on the UK system. Teacher training is an opportunity for UK ODA or policy engagement, supporting countries with resolving issues of teacher recruitment and deployment.

5.0 International Education

5.1 In the five focus countries, economic growth has resulted in a burgeoning middle class with disposable income available to spend on education, including private schooling. Consequently, the market for International Schools has grown by around 36% in the region since 2013. Demand is predicted to continue.

5.2 The Southeast Asia K-12 International Schools market was valued at $396.2 million in 2020 and is anticipated to grow at a compound annual growth rate of 22.93% from 2021 to 2028.

5.3 The UK has a clear competitive edge in international education across the five countries. Of the 7,614 schools in the region, 4,919 (64.6%) use a British curriculum (including the National Curriculum and Cambridge) and English is a the most common medium of instruction. This provides potential opportunities for private British firms such as Edexcel, and Cambridge International to provide services for exam administration, quality assurance, teacher support or accreditation. In some contexts, new schools may be established. These should aim at the , aiming at middle range this Is where greatest growth has been.

5.4 The growth in the international school's sector, will also increase the need for teachers qualified to teach an international (British) curriculum, in a foreign language (English). This has the potential to generate more demand for the UK IQTS from individuals or from foundations and organisations managing international schools. It Is difficult to assess the size of the market and demand for this.

6.0 Education Technology

6.1 The EdTech market has grown substantially across all five countries, with £ 85,400,000 invested in the past 8 years (2015-2023). It is likely to continue to do grow as EdTech has been identified as a tool to transform education and meet development aspirations by all five Governments.

6.2 Although there has been some EdTech innovation, in general success varies and EdTech seems to be for the more affluent in advantaged schools and regions at present. There appears to be limited use of EdTech as part of core teaching and learning in government schools and more products focussing on 21st Century Skills and English Language, rather than core literacy and numeracy which continue to be persistent challenge in most of the five countries (Viet Nam excluded).

6.3 In general, education ministries find it challenging to manage EdTech, teachers lack confidence and motivation and there is not much EdTech for children with SEND. Out of 108 EdTech suppliers identified across the 5 markets, only 22 (20%) indicated that they provide inclusive solutions, that can improve accessibility for disadvantaged users with only 4 of those 22 (18%) also aim to be used by teachers to support learning, and target teacher CPD. In some countries (e.g., Indonesia and Thailand) there are serious online safety issues.

6.4 There are strong competitors. Most investors in Southeast Asia EdTech are from the USA and the most active regional investors are from Japan and Singapore (source: EdTech Ecosystem: 2022). There are also challenges to market access in some countries however (e.g. Indonesia) and each country needs to be assessed separately.

7.0 Equity, Inclusion and Safeguarding

7.1 Girls' education is not a major equity issue across the five countries in K-12 and higher education and is not a priority policy for any of the national governments. Girls are accessing, persisting in and completing school at least in parity (if not more than) with boys and are generally performing better in core skills.

Gender Parity in Education

	Primary Schools	Secondary Schools	Higher Education
Indonesia	0.97	1.03	1.18
Malaysia	1.00	1.00	1.00
Philippines	1.03	1.00	1.00
Thailand	0.98	1.02	1.00
Viet Nam	0.99	1.03	1.00

Source: WEF (2022) Global Gender Gap Report.

7.2 Apart from the Philippines, female enrolment in TVET is generally lower than for males. The number of females enrolled in technical subjects such as automotives, construction, engineering and metals in all countries is even lower.

7.3 Socio-economic status and location are the most common drivers of inequity in education across all five countries with ethnicity being a factor in Viet Nam and children affected by conflict and natural disaster in the Philippines. Whereas all five countries promote the inclusion of children with SEND and are making progress, challenges and room for improvement remain.

7.4 Few countries seem to train teachers on child protection and safeguarding. Violence and bullying in schools (including by teachers in some contexts) is commonplace and cyber-bullying is increasingly becoming a challenge. Increased screen time has been associated with adverse impacts on physical and mental health: 70% of adolescents in Indonesia, Malaysia and Thailand reported having been upset by their online experiences over the past year.

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