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## Chapter

# Transnational Education and E-Learning during a Pandemic: Challenges, Opportunities, and Future

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## Abstract

Higher education institutions are globally facing unprecedented disruptive trends, which have rapidly changed the landscape of global higher education due to the COVID-19 pandemic. While transnational education (TNE) is increasingly becoming popular as a provision for internationally recognised education at the doorstep of students, the temporary shift from traditional classroom teaching and learning (T&L) to remote online T&L caused by the COVID-19 pandemic has been challenging for all stakeholders to provide the similar student experience as previously. Regarding TNE programmes, the emergency replacement of traditional classrooms with virtual ones has also raised significant challenges of both equity and pedagogy. However, given the current crisis in higher education, TNE can be a cornerstone in rebuilding the post-COVID-19 international education system. This chapter explores the challenges faced by the TNE programmes based on a systematic literature review and information gathered informally from various stakeholders and discusses the opportunities and future impacts in teaching, learning, and student support as the post-COVID-19 educational landscape emerges. It also provides an insight into how a sustainable transnational learning community can be developed for the quality and sustainability of international higher education in this new decade.

**Keywords:** transnational education, higher education, COVID-19, student experience, blended learning, mixed-mode learning, e-learning, remote online education

## 1. Introduction

The current COVID-19 pandemic has shaken almost all sectors including the education sector, and it has caused unprecedented disruption to education systems worldwide, resulting in the closure of schools, colleges and universities in most countries. The closure of educational institutions nationally was essential to prevent the spread of the virus using social distancing. To limit the spread of the virus and render the continuation of education, the predominant model used for education

delivery is remote online teaching and learning (T&L), which is considered the best path forward. The government also recognises the increasing importance of online T&L in this dynamic world [1]. It was suddenly necessary to transform all educational activities ranging from in-class teaching and learning activities to assessments into online-based. As a result, the COVID-19 pandemic has changed the overall global education landscape and strengthened the visionary idea that education should not be limited by where or how you learn, what matters is that you learn from anywhere, at any time. In this situation, technologies are playing a key role in this, thanks to recent technological advancement. As a result, universities have started to develop blended learning approach, making use of key technologies, to prepare themselves to survive and flourish together for the continuity of education even in emergencies.

As information and communication technologies (ICT) have kept advancing, online education has become more feasible technologically, economically, and operationally [2]. Henceforth, the T&L approaches are continually kept changing, and online education has been adopted globally by institutions as an accepted teaching and learning form [2, 3]. However, a common perception about delivering online education is that the quality of online education is perceived as not equal to the traditional face-to-face classroom-based education.

During the COVID-19 pandemic, there are in fact as many as nearly 1.6 billion learners in more than 190 countries across the globe affected by the closures of educational institutions at the national level, representing approximately 90% of the global student population [4]. Additionally, it has been reported that there is a decline in the number of international students in many popular studies abroad countries. For example, new international student enrolment has dropped significantly, reporting a 43% decrease in the US in Fall 2020, according to the Institute of International Education (IIE) [5]. On the other hand, transnational education (TNE) is an emerging area of scholarship with a growing number of both students and providers moving across national borders to deliver higher education programmes. A similar situation (the closure of host institutions) also happened to most TNE programmes, especially TNE programmes in those countries, which were disrupted right at the beginning of the pandemic and had to close their activities. As a result, the pedagogic activities in TNE have rapidly been transformed into online education or remote online T&L due to the travel restrictions, thanks to the recent advancement of educational tools and technologies. Although most TNE providers had forced exceptionally swift adaptations of remote online T&L, the virtualisation of the TNE programmes, however, raised significant issues of both equity and pedagogy.

Due to the length of the COVID-19 pandemic, online education or a combination of online and traditional education (blended) is today an integral part of education and learning across the world. A growing number of colleges and universities have been implementing and adopting such approaches. Likewise, the perception of the online education quality mentioned earlier is changing and COVID-19 while being a hazard to humanity has evolved institutions to invest in online education [6]. Moreover, online education has proven to be valid and useful for many students during the COVID-19 pandemic that is opening up a new era - the revolution of online education.

Despite the current transformation of education systems and the challenges faced, the TNE programmes can still be a cornerstone in rebuilding the post-COVID-19 international education system. Therefore, this chapter firstly provides the concept and models of TNE programmes describing their pros and cons, as well as discusses the challenges faced by the TNE programmes during the COVID-19 pandemic and the opportunities created due to the replacement of traditional

classrooms into the remote online T&L (restructuring the education system). In this chapter, authors have shared their experience on how their TNE students experience remote online education and cope with COVID-together with the benefits/challenges of remote learning for TNE students. Furthermore, this chapter provides future barriers and envisions of the future (post-COVID-19) of transnational higher education.

## **2. Methodological perspective and approach**

This chapter presents a review of the scholarly and grey literature on transnational education and e-learning with a special emphasis being put on COVID-19. The commentary and discussion are structured around objectives, perspectives, and experiences of key stakeholders of TNE facing challenges and taking measures during the COVID-19. As such, a systematic approach was used to identify 57 peer-reviewed articles from 2010 to 2021. Of which, only 19 articles were published before the COVID-19 pandemic and these articles are mainly reviewed for compiling the introduction of TNE and the related information while the remaining articles are mainly focusing on the challenges and opportunities created around TNE and e-learning as well as the good practices adopted by different stakeholders.

To complete the review, we searched the Web of Science, and Google Scholar for literature using the keywords “transnational education,” “e-learning,” “COVID-19 pandemic,” “online education,” and “blended learning.” We focused our search on peer-reviewed journal articles from 2010 to 2020. Theoretical studies, editorials, and non-peer-reviewed literature were excluded from the review. Additionally, we explored recent reports and guidelines produced by local governments and local higher education regulatory bodies for quality assurance of top TNE host and foreign countries. The inclusion criteria for e-learning and online education were mainly related to transnational or cross-border higher education. On the other hand, blended learning covers a broad range of learning approaches and is often used as an umbrella term to capture an assortment of blends or is placed on a spectrum ranging from more face-to-face instruction to more technology-assisted instructions. There are three categories of blended learning in terms of i) low-impact blends, where extra activities are added to an existing course; ii) medium-impact blends in which activities in an existing course are replaced; and iii) high-impact blends in which a blended course is designed from scratch [7]. In this review, the inclusion criteria for selecting articles on blended learning were those studies that were conducted in blended learning environments with reducing face-to-face instruction or replacing face-to-face instructional activities with remote online learning, which are mainly the case for transnational education during the pandemic.

After screening and excluding articles, 59 articles were finalised for the systematic literature review based on the above-mentioned criteria. Moreover, several good practices for mitigating some concerns for TNE and online learning (e-learning) are highlighted based T&L related discussions and meetings throughout the academic years 2019–2020 and 2020–2021.

## **3. Overview of transnational education (TNE)**

Exports of education have significantly grown over the last two decades. This is achieved through developing sophisticated and successful approaches to the provision of higher education internationally to many students, who are located

outside of the countries of higher education institutions (HEIs) that are awarding the degree. These approaches can be an array of collaborative arrangements with degree-awarding institutions from major education-exporting countries [8]. Traditionally, those students would have travelled to foreign countries to study for an international qualification and are now pursuing foreign degrees in their home or neighbouring countries at local institutions. This form of award-bearing educational provisioning by an HEI in one country to students based in another country is termed as *transnational education* (TNE) or sometimes as *cross-border education*. The range and number of TNE activities, such as remote campuses and joint degree programmes, continue to grow rapidly to address international customer demand, especially in higher education [8].

### 3.1 Definition of TNE

Among many definitions and interpretations of TNE, according to the UNESCO/Council of Europe Code of Good Practice in the Provision of Transnational Education, “TNE refers to study programs or educational services in which the learners are located in a country different from the one where the awarding institution is based” [9]. In other words, TNE is education delivery from institutions in one country to students in another. Usually, students do not cross national borders or move to the country of degree-awarding HEI to undertake study at an overseas institution. Instead of students moving to foreign countries, the programmes move to the students in their home countries [10]. Moreover, besides the host country’s domestic students taking TNE programmes, students taking TNE programs including expatriate students living in the host country and international students travelling to the TNE host country especially for taking a TNE program [10]. Therefore, the definition of TNE can be generalised as:

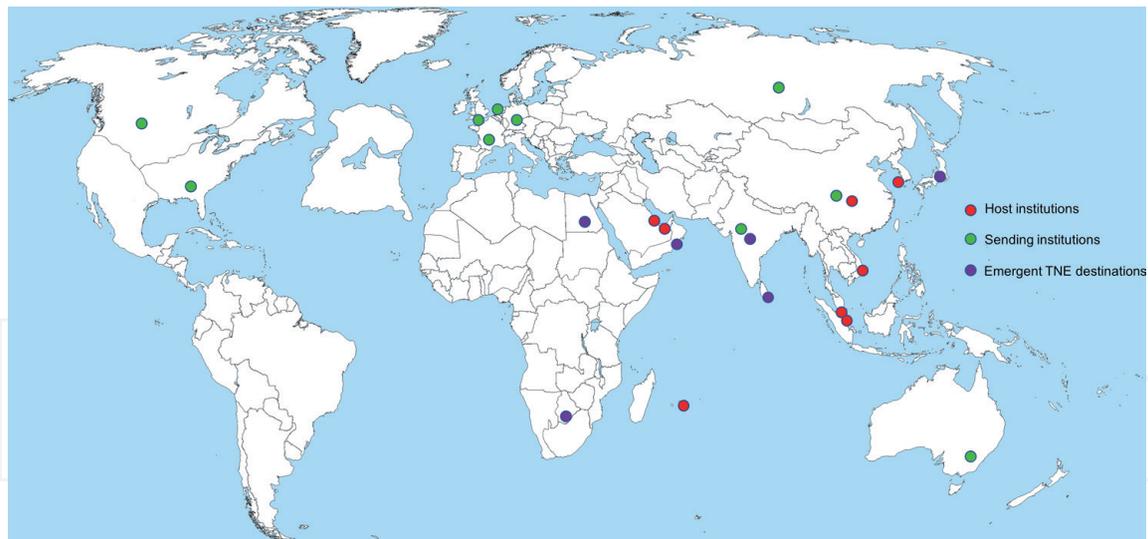
*TNE is all types of higher education programmes in which students based in country B study for a degree from a university in country A.*

**Sending/Foreign TNE country:** TNE students get a degree award from a foreign institution and the country, in which the awarding institution is based, is called the Sending or Foreign TNE country.

**Host/Receiving TNE country:** The country, where TNE students take the TNE program to achieve a foreign degree is called the host or receiving TNE country, and the institutions in that country are called host institutions.

The delivery of such an education is often done through joint degrees or partnerships with overseas host institutions, branch campuses or online courses with qualifications. In recent years, many countries have engaged in TNE, and there has been an unprecedented growth of predominantly Western foreign universities delivering education throughout Asia, the Middle East, and Africa [11–13]. The UK, US, Australia, Germany, and France are the leading exporters of TNE or sending countries providing the TNE programmes [14]. On the other hand, China, UAE, Malaysia, Singapore, and Qatar are the leading host countries studying hundreds of thousands of students for a TNE programme [14, 15]. Based on the data available from different sources [14, 16], **Figure 1** illustrates the top host and sending countries for TNE activities including some emergent destination countries.

While most TNE programmes provide education at the undergraduate level under different modes of TNE with engineering, technology, maths, medical science, and computing being the principal subjects of study, the post-graduate level TNE programmes are also getting popular [16].



**Figure 1.**  
*A list of top transnational higher education sending, host and emergent destinations.*

#### 4. Benefits and criticisms of TNE

TNE mainly consists of three main stakeholder groups, namely students, partner institutions (both host and foreign) and governments [17]. An appropriate setting of a TNE programme can be considered as a win-win option for all those three main stakeholder groups. For many students, getting a degree in popular study destinations such as the UK, US, and Australia sounds like an enriching and exciting experience. However, they are expensive and not everyone can afford them. Achieving an international degree by studying in the home country via the TNE route at a considerably lower cost is a lucrative option. Students can get the learning experience of international standards (i.e., exposed to pedagogies from Europe, the US, Australia or wherever the awarding institution is based) receiving quality international education without having to go overseas. Besides paying much lower tuition fees, which are often much higher if studying at the foreign institution directly, students also save their travel and accommodation costs [18]. In addition to developing a deep conceptual understanding of the content of the subject of study, students are often taught by using innovative teaching and learning practices exploring state-of-the-art technologies. Moreover, they are usually assessed by exams and their participation in discussion and group projects that allow them to gain valuable soft skills such as communication and teamwork [19, 20].

Moreover, studying abroad is a challenge - an introduction to a new culture and an emotional roller coaster at times when your daily routine, culture, and the attitudes of people around you are no longer familiar [21]. In some cases, culture shock<sup>1</sup> can resemble or trigger study abroad depression. In the case of TNE, students often face culture shock less and they will be able to concentrate more on their studies. However, it should not discourage students to stop studying abroad due to the concern of culture shock as there are hundreds of ways and guidelines available to overcome cultural shock while studying abroad [21–23]. It is also equally beneficial for both home and foreign institutions that TNE programmes can easily gain revenue streams with relatively little risk or effort. On the other hand, authors in [13] have highlighted that host country governments have found TNE as a potential contributor

<sup>1</sup> The process of recognising, understanding, and adapting to a new culture is called culture shock.

to increasing higher education capacity, satisfying skilled labour needs and contributing to knowledge creation and innovation (e.g., to create an “Education Hub”). For example, almost 90% of the population in the United Arab Emirates (UAE) is an expatriate, also known as non-Emiratis who cannot enter public universities, where education is free. To fulfil the demand from their expatriates’ children, the UAE government has allowed foreign universities, mainly from the UK, USA, Australia and India. Moreover, it is mentioned that the host government’s support is an essential part of TNE activities to be continued [24].

Despite the limited number of failed and/or non-profitable TNE partnerships for the foreign institutions, which are mainly due to the overestimation of the student enrolments and revenue streams, the underestimation of the start-up costs [13, 17] or failure to foresee the difficulties of operating in an unfamiliar business environment or unanticipated political opposition abroad, the financial returns from TNE are very modest and can never replace export education [24]. Moreover, many awarding TNE institutions are often expanding their operation in multiple host countries and multiple institutions in the same host country while they are also moving into new, larger, purpose-built campuses in the case of International Branch Campuses (IBC) (will discuss later). It is not only all about financial gain for the institutions, which is important for its expansion and sustainability but also to enhance their prestige, legitimacy and educational quality helping themselves in building a global brand. Additionally, some institutions see TNE engagement as other ways to enhance their research, knowledge capacity and cultural understanding (Knight, 2006 and [17]).

Even though the TNE programmes are becoming a popular way of achieving foreign degrees, there are some criticisms of TNE concerning the student experience and satisfaction from the TNE. It is expected that TNE is to provide identical programmes as the awarding institution to preserve its reputation [25]. However, there is a concern among many students and/or some host governments that TNE programmes are unlikely to be delivered by the core faculty of the awarding institutions, so the quality of such TNE programmes may not be the absolute equivalence to the one on the campus of the awarding (foreign) university [26]. For example, concerns about the quality of some TNE provisions in China by UK universities led to the Ministry of Education abruptly cancelling the licences of many HEIs and calling off many partnerships that were under development [24].

Moreover, it is also highlighted based on a TNE tutor survey [25] that it was advocated for the need to tailor the curriculum to the culture and context resulting in not all the content being necessarily transnationally transportable. Other most prominent concerns are related to misalignment between home and branch campus, replicating diversity and quality of the student body, mirroring forms of cultural imperialism, lack of data to drive decision-making, organisational culture and policies, and the ability to adapt to the “new” local context [27].

#### **4.1 Common forms of TNE**

Under the concept of TNE as defined earlier, academic institutions are collaborating to jointly teach students or solely providing TNE (with no direct relationship with a local HEI) to teach students who are benefitting from quality teaching locally without needing to travel abroad. The TNE programmes and activities can be delivered through a wide variety of forms or modes ranging from remote campuses to joint degree programmes with institutions sharing best practices on a global scale. There are mainly two major categories of TNE [10], namely *collaborative TNE provision*, under which foreign institutions have a local collaborative partner from the host country for the delivery of the academic programs, and *independent TNE provision*

(stand-alone), under which no institutions from the host country are normally involved in the process of the design or delivery of the academic program.

Under these two categories, there is a wide variety of concepts and modes of operation in transnational education. They include but are not limited to online and distance learning, joint and dual degree programmes, fly-in faculty for short courses or international branch campuses. Based on the literature survey, the followings are the common forms of TNE that are widely adopted around the world and summarised in **Table 1**:

**1. Twinning and Articulation:** This is a systematic recognition by an institution (say, *A*) of specified study at an institution (say, *B*) in another country as partial credit towards a program at institution *A*. This approach allows students to experience the campus of the foreign institution by physically studying at the foreign campus of the awarding university for some time upon agreement of the TNE arrangement. Often, the study period is split between partner institutions and the study in the foreign country could be involved either as a compulsory period of study or as an optional part of the programme [16]. For example, students registered with the overseas partner can have a guaranteed entry into a UK-validated programme if they achieve an agreed level of performance in their studies with the overseas partner [16].

**2. International Franchising and Degree Validation Agreement:** This is a contractual agreement between institutions from different countries based on licence and/or mutual recognition. In this model, an institution (franchiser) in a foreign country approves an institution (franchisee) in the host country to provide one or more of the foreign institution's programs to students in the local institution. Often the home university retains authority for setting and marking assessments and examinations. While franchising is a financially inexpensive way of penetrating a new market, problems often arise if the home university and the joint venture partner, usually a private for-profit college, have divergent objectives (e.g., academic quality versus profit maximising) [28]. Under the franchising arrangement, new trends are evolving from individually franchised programmes to the development of new private independent universities in a host country that primarily offer franchised academic programmes from different foreign providers [12].

Types of TNE/categories	Independent TNE provision	Collaborative TNE provision
Twinning and articulation	No	Yes
International franchising and degree validation	Yes	No
International branch campus (IBC)	Yes	No
Joint/Dual/Multiple degree	No	Yes
Co-founded/Joint institutions*	No	Yes
Distance/Online delivery	Yes	No
Progression agreement/Sequential degrees	No	Yes
Course-to-course credit transfer	No	Yes

\*May also be independent in the sense that there may not be any relationship with a local institution from the host country, but only with multiple institutions from foreign countries [10].

**Table 1.**  
*Types and categories of popular TNE formats.*

In the validation model popularised by UK universities, this is just a variation of franchising that the curriculum for a degree is designed by the awarding institution in the foreign country and taught in the home university. The recognition of the degree and the quality of the degree are tested by the awarding institution. In other words, validation is a variation of franchising, where instead of the home university developing and licencing the curriculum, the curriculum is developed by the foreign partner and, through an institutional accreditation process, is deemed to be equivalent to that of the home university, thus allowing the partner to offer the university's degrees.

**3. International Branch Campus (IBC):** International branch campuses and flying-faculty models are also part of the broad set of TNE engagement models. In this case, campuses are often set up by a specific foreign higher education institution in another country to provide its education to local students in that country. The awarding (foreign) institution has some degree of responsibility for the overall strategy and quality assurance of the branch campus [13]. The branch has basic infrastructure such as a library, an open-access computer lab and dining facilities, and overall, students at the branch have a similar experience to students at the home campus [13]. They may be either fixed or temporary. This is similar to international franchising, but the franchisee is a campus of the franchiser. Among others, China, UAE, Malaysia, Singapore, and Qatar are the major transnational higher education hubs hosting most IBCs [17]. While the rate of IBC establishment has slowed due to many factors (e.g., difficulty to attain student recruitment targets leading to financial loss), the demand for IBCs is still there in some parts of the world and over 306 IBCs are operating around the world including newly opened IBCs in Morocco, Mexico and Indonesia in the last year [29]. For showing an overall picture of IBC development globally, **Table 2** summarises some statistics based on literature.

Attributes	Remarks	Reference
The overall number of students enrolment in majority IBCs	Usually, <1000 students	[17]
Major drivers for IBC development	<ul style="list-style-type: none"> <li>• For seeking to establish an education hub</li> <li>• For generating foreign exchange (financial gain)</li> <li>• For producing skilled labour and employment</li> <li>• For projecting soft power</li> <li>• For enhancing research, knowledge capacity and culturing understanding</li> <li>• For enhancing institutional prestige, educational quality and for establishing a global brand (increase global status and reputation)</li> </ul>	[17, 24]
Unsuccessful IBC cases and lessons learned	<ul style="list-style-type: none"> <li>• University of East London closed its IBC in Cyprus after recruiting only 17 students in its first year of operation</li> <li>• University of Wolverhampton closed its IBC in Mauritius within 3 years (only 140 students enrolled)</li> <li>• University of Aberystwyth closed after 2 years of its IBC operation in Mauritius (only 106 students enrolled)</li> </ul> <p>All these cases were unsuccessful due to an underestimation of the set-up costs and overestimation of the student enrolment.</p>	[17]

**Table 2.**  
*Some attributes of IBCs.*

4. **Joint or Dual or Multiple Degree:** This is one of the most popular modes of TNE engagement with offering one or dual or multiple qualifications. In the Joint Degree programme, one academic qualification is offered with badges of both sending and host HEIs on the certificate while two separate qualification certificates are provided individually for each HEI for the Double Degree case, which is quite popular nowadays. Additionally, Multiple Degree Programmes offer at least three qualification certificates.
5. **Co-founded or Joint Institutions:** This is relatively a new form of TNE is an interesting alternative to the IBC model co-founded by multiple universities from different countries [10].
6. **Distance Delivery:** Distance education is another form of the TNE landscape, where local host country support is being provided to distance education students [10]. those distance education programmes that are delivered—through satellites, computers, correspondence, or other technological means—across national boundaries.

#### 4.2 Delivery modes of teaching and learning materials

While there are numerous TNE formats discussed in the previous section, the delivery of T&L materials can be varied for the same TNE format at different institutions. Depending on the TNE formats, some TNE programmes feature a blend of online and face-to-face delivery of teaching and learning materials, and others consist of wholly online or face-to-face delivery or a combination of both these modes at different ratios [16]. For example, some Joint Degree programmes offer in-person delivery of T&L materials and in this case, faculties from both foreign and host institutions are directly involved in the T&L delivery. Sometimes foreign institutions recruit their staff based on the host country only (i.e., their faculties live in the host country during the whole term) or at the foreign institution and send them to the host country for only T&L delivery (flying faculty). The teaching and learning delivery can be in the Block teaching style, where lectures, tutorials and other forms of teaching are provided in an intensive block, sometimes as short as 1 week and student learning is compressed, typically with students studying only one course at a time. Alternatively, they can be spread over, e.g., 15 weeks of student learning and assessment (the conventional to the delivery of a full-time course of study in the UK).

#### 4.3 Key elements in developing a TNE

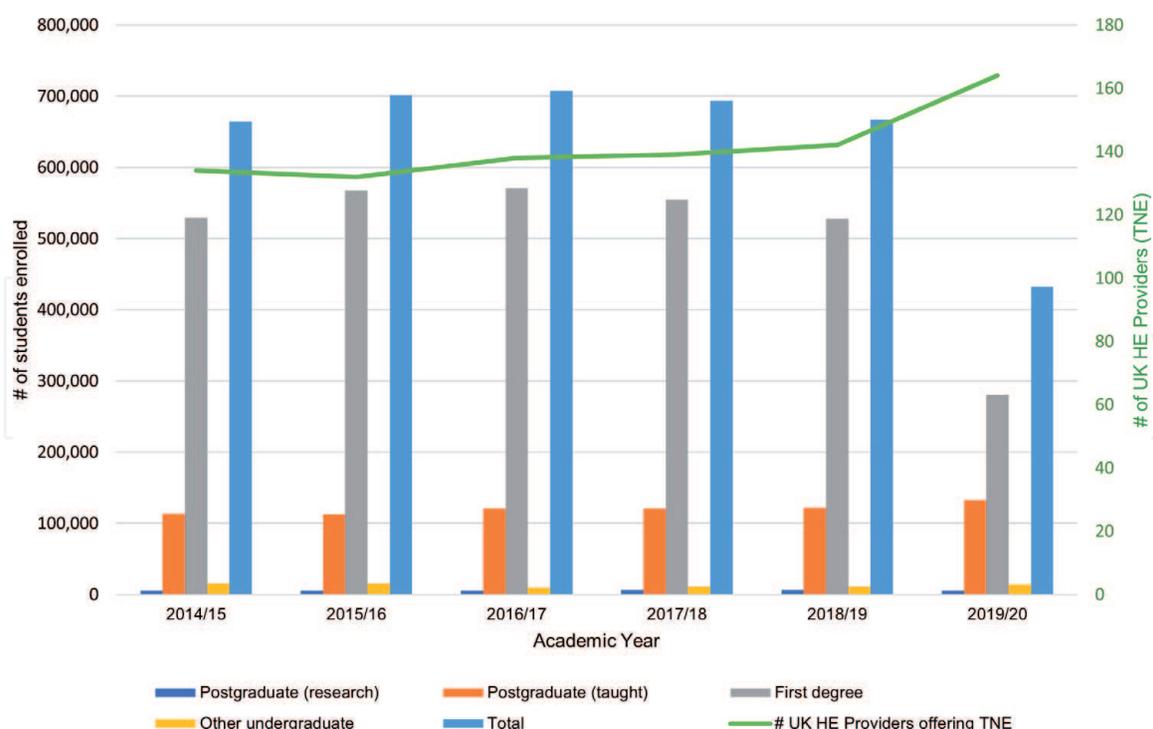
Over the last decade, there has been an evolution in the development of new forms of TNE programmes. TNE is growing rapidly and getting widely accepted as well as becoming a popular way of acquiring international educational awards. In the TNE development process, many new elements related to higher education have emerged and are continuing to emerge. Examples of such key elements are new actors, new partnerships, new modes of delivery and new regulations [10]. The TNE modes discussed above are being developed based on defining and agreeing upon the key elements, i.e., the type of qualification TNE students get, mode of delivery, faculty arrangement, curriculum development, accreditation and so on, which are elaborately discussed in [10] and interested readers are referred to in this article [10].

#### 4.4 Growth of TNE in the UK and around the world

The UK offers world-class education with a global reputation and a strong presence in global markets. Currently, the UK is the second largest provider of

international education with a 10% share of the global market. When it comes to exporting the UK education expertise abroad, there is a strong demand all over the world for the quality of British education products and services. For example, the British Educational Suppliers Association (BESA) identified that China is one of such markets worth \$500 billion, with \$677 million spent on EdTech each year<sup>2</sup>. The UK dominates the provision of TNE around the world, especially in those countries that aspire to be regional education hubs. For example, Malaysia relies heavily on transnational education to meet the high demand for tertiary places which local public universities could not adequately meet [15]. The main reason for this is the quality and acceptability of British education around the world (e.g., a competitive employability advantage and an international outlook). It is also believed that a UK TNE provides valuable cultural capital in the forms of knowledge, skills, dispositions, and qualification. On the other hand, UK TNE programmes are commonly marketed as cost-effective for students who could not study wholly overseas but still seek a UK education and its associated benefits [15]. Most UK TNE programmes are usually offered as similar to those offered at the main (foreign) institution in the UK in terms of, e.g., course content, academic standards and qualification awarded.

Statistically, the UK is one of the leading exporters of TNE with 164 UK higher education providers reported 432,500 students studying through TNE in 2019/20, which decreased by 234,315 students (−35.2%), which is largely due to an increasingly competitive market, a developing local higher education sector in the host countries and changes in local regulations, and increased by 22 UK higher education providers (+15.5%) as compared to the corresponding data in 2018–2019 [30] (source: HESA<sup>3</sup>). As compared to the number of international students enrolled in the UK in the same year, there were ~ 1.4 times higher and ~ 1.22 lower UK TNE students, respectively. The number of UK TNE students and the number of UK TNE providers over academic



**Figure 2.** Transnational students studying wholly overseas for a UK higher education qualification in 2019/20 (note: Only showing countries with over 1000 transnational students).

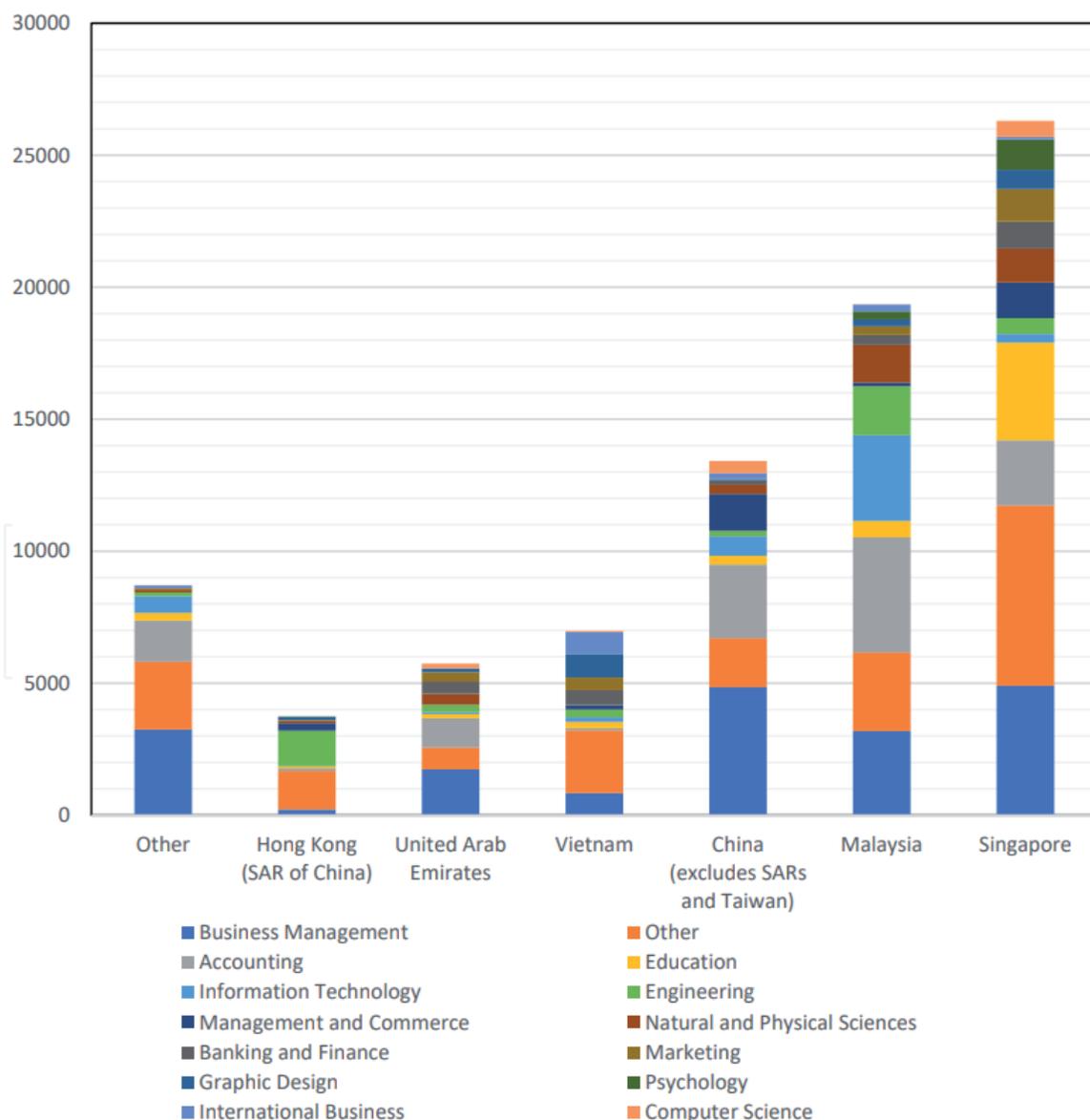
<sup>2</sup> [www.great.gov.uk](http://www.great.gov.uk)

<sup>3</sup> <https://www.hesa.ac.uk/>

years 2014/15 to 2019/20 is illustrated in **Figure 2**. It is found that there is an increasing trend of the number of UK HE providers involved in TNE programmes even though the total number of UK TNE students has started declining from the academic year 2016/17, which is mainly on the undergraduate programmes. However, there is a slow gain in the number of UK TNE students in the postgraduate (taught) programmes.

Australia also maintains a well-established reputation as an education exporter and many Australian providers operate in several countries offering quality higher education through different TNE arrangements. **Figure 3** shows the number of students studying a TNE course with Australian Providers at a campus outside of Australia in major markets, and it can be seen that Singapore, Malaysia and China are the three markets studying the largest number of enrolled students in 2018 [11]. Besides these markets shown in **Figure 3**, there are other potential markets (e.g., Sri Lanka, Vietnam, and India) identified for significant growth.

TNE is rapidly evolving with rapidly changing its scope and scale and emerging partnership models, modes of delivery, and regulations. Likewise, the changing nature of TNE partnerships has also been noticed in Australian Providers over a couple of decades. For example, in China, there are 150 Chinese-Australian programmes at the Bachelor level and above since the first Chinese-Australian



**Figure 3.**  
 TNE students at an offshore campus in major markets in 2018 [11].

programmes that were first approved in 1994, with Australia being the third-largest partner country behind the UK and the US [11]. Based on consultations and surveys undertaken by a study in [11], all Australian TNE programmes are managed by individual providers that employ their specific approaches and TNE partnerships and delivery models are in a state of constant evolution. IBCs, which provide greater control over quality and standards at the cost of larger investment and risking sustainability, are the most preferred TNE models for most Australian TNE providers, and as a consequence, at least six Australian IBCs in different markets have been closed.

#### **4.5 Main issues of TNE partnerships: regulatory and quality assurance**

TNE implies the crossing of cultural, linguistic, legislative as well as national and often intercontinental borders. In most cases, the rapidly growing economies such as the Middle East and Asia are often the target regions for the TNE partnerships, where the linguistic, cultural, political and legislative environments are completely different from those of the exporting universities that are mainly from the North [28]. Therefore, it is extremely complex to adapt and harmonise different systems working with different keys and different reference points.

Additionally, there is no TNE benchmark or general legal framework, which could harmonise the different educational structures and values of TNE institutions and qualifications. Therefore, TNE partnerships must comply with the legal requirements of both foreign and host countries and show standards of good practice. Regarding the TNE policy, practice and regulatory aspects, many host countries are imposing new restrictions. For example, authors in [11] have also found that “providers are most concerned about a lot of the sovereign issues, and by that, I mean how they’re dealing with governments and the rules in different countries and navigating that can be quite complex”. However, this brings the benefits of having excellent super- or extra-national universities that might find difficulties to expand their study courses outside the national boundaries, whilst some non-recognised and fraudulent institutions (the so-called “degree mills”) can operate in different national contexts at the same time.

### **5. TNE and the COVID-19 pandemic**

Since early 2020, the spread of the novel coronavirus COVID-19 has started to cause a significant impact in many sectors across the world, and the education sector is not an exception, which has led to profound changes in the education sector. After declaring COVID-19 as a pandemic on 30 January 2020 by the Director-General of the World Health Organisation (WHO) [31], many governments around the world had taken pandemic precautionary measures such as social distancing to prevent the spread of the COVID-19 virus. Within weeks, it has led to the unprecedented health and socio-economic crisis, which we live in and which will mark our times for long, and has severely impacted the entire education sector around the world [3]. Notably, all levels of education have been stopped by the closure of schools, colleges and universities from the respective local government. For example, the Chinese government first announced or implemented school and universities closure and asked to take all forms of education online for the entire nation, and shortly after, many other governments also announced the same. This is the first time the world has ever seen the digital pedagogical revolution. Many countries also imposed strict travel restrictions and locked down entire cities resulting in significant impacts on education. One of the measures adopted by most countries for the continuation of education is to

switch from traditional classes into remote online formats. Likewise, most TNE programmes regardless of their format also decided to transform the traditional teaching and learning activities into remote online education [32]. It was a rapid transition of education delivery involving pedagogic transformation, technology adoption in teaching and learning, and so on [33–35].

While international student mobility has been severely disrupted by COVID-19, TNE is not as vulnerable to travel restrictions and closed borders due to its nature. Therefore, TNE is in a better position to continue to accommodate the demand for international qualifications by adjusting some parameters, either as a short-term ‘holding pattern’ or as a rapidly growing business model for the post-pandemic world.

Even though there were some criticisms about the quality of transnational education regardless of the partnership models and delivery modes, the merits of TNE is now visible in the event of the COVID-19 pandemic that many students, who originally planned to travel abroad for a foreign degree, are now decide to study from their home country. This is due to governments being forced to impose international or domestic travel restrictions, worry about health and well-being in a foreign country, families being in financial hardship during the pandemic so worry about sending their children abroad to high-cost countries and so on [36]. In such cases, TNE is an alternative option for students wanting to achieve a foreign degree at an affordable cost. Moreover, it has also been noticed from many Alumni statistics of TNE graduates that employers value the TNE experiences in a positive way. Therefore, the opportunity to achieve a foreign degree via the TNE partnerships route is becoming more attractive and popular [37].

As for the TNE programmes in China, there was uncertainty before the start of the new semester in 2020 due to the fast spreading of the virus and it became apparent in mid-February 2020 that a plan B option is required. Also, most academics took it seriously and started to prepare for online teaching and learning [38]. In the end, universities rapidly transferred the onsite teaching to online [39]. A similar situation happened in other TNE host countries when the virus was progressively moving to other countries such as Malaysia, Vietnam, Thailand, Korea, Singapore, the Middle East, etc. Some foreign institutions took extra measures in terms of rearrangement of the course delivery (e.g., blended), curriculum (e.g., changing the weight of coursework and examination), removal (or switching) of in-laboratory activities (into, e.g., computer-based activities) and so on.

With the COVID-19 pandemic and recent developments around the world, both parents and students are concerned about safety and well-being and no longer feel that it is safe to travel and settle in another country. While many students have had their plans to study abroad, they defer and/or cancel their plans to study abroad at the last minute due to fears and uncertainties over COVID-19. Moreover, some students have decided to remain in their home country while enrolled in overseas universities studying remotely and/or to take admission at a host institution for the foreign degree via TNE programs. However, the time difference between, for example, the US and Singapore, put off many students thinking that the lessons would be held from 8 pm to 6 am [37].

## **6. TNE and online learning (e-learning)**

The COVID-19 pandemic has opened the puzzle to test the preparedness of HEIs of how universities deal with a crisis for the continuation of essential teaching activities such as delivering courses, sharing lectures in real-time and running video-based international tutorials [40]. Many problems in TNE have been created by the closure of universities and the imposed travel restrictions, such as interruption of student learning

and engagement, review and internal evaluation or continuous assessment, recruitment of teaching staff, maintaining of the academic calendar and admission processes in the next session, etc. (Rathe & Sarkar, 2020). The easiest and fastest way to keep the educational activities going is by switching to an online format. It is often referred to as online learning or online education or remote online teaching and learning.

Online education has been there for many years, but it is not an “off-the-shelf” process for most universities and goes far beyond the digitalisation of on-campus material and activities. Instead, it requires careful planning and a substantial amount of resources including a high workload for staff, and any economies of scale will only be realised in certain courses and the long term [41]. Otherwise, the risk of diminishing the student learning experience and education quality may arise.

Over the last almost 2 years, the growth and broader adoption of online education have been enormous and there is an acceptance of replacing parts of the regular provision (such as lectures) among academics. While the in-person interaction in the traditional classroom is an invaluable and irreplaceable component of teaching and learning, there has been a greater change in the perception of key stakeholders including regulators, higher education providers, academics, students, and families when it comes to the value of online education [41].

We have witnessed over the past two years that remote online teaching and learning have been adopted and recognised by most countries’ institutions even though some of those countries have not formally recognised online education in the past [42]. The COVID-19 pandemic has not only proved the acceptability and the efficacy of online teaching and learning but also there is greater flexibility in terms of course content, conducting the assessment, engaging learners or delivery permitted by both the host country and foreign country institutions. Hence, COVID-19 while being a hazard to humanity, has a greater impact on evolving institutions to invest in online learning.

### **6.1 The implication of a rapid change and education quality**

Where the original delivery model involves students physically attending a campus or other study location, the providers, awarding bodies and students are needed to adopt different forms of delivery. The location of the students will also influence any revisions to the mode of delivery. In some countries, a certain amount of in-person or on-campus delivery has been able to continue. This has resulted in some blended or dual delivery where on-campus activity is combined with the provision of materials and staff contact through digital means. For example, models which involved flying faculty visiting from the UK have, for the most part, moved to online rather than in-person delivery due to travel restrictions. Models which include local tutor support, such as staff located in a branch campus or TNE partner staff, in some cases have been able to continue depending on the local government requirements for managing COVID-19.

Authors in [42] have highlighted and recommended an important aspect that any retrospective changes that had to happen suddenly, should be submitted for approval by professional, statutory, or regulatory bodies, such as collaborative framework documents, annual activity agreements, operational delivery plans and so on. It is also important that the decision-making process on the changes involves key professional services such as IT and library services, given the need to ensure continued access to learning resources [42, 43].

### **6.2 Some tips for remote online learning (e-learning)**

This is the first time the world has ever seen a rapid transition from face-to-face learning to remote online learning. In many cases, this happened with little advanced

support or guidance, and as a result, not everyone made a smooth transition to teaching this way. While the basis of teaching such as content, pedagogy and assessment remain the same as the centre of successful teaching for both face-to-face and remote online learning, the forms of teaching and learning interactions may change. With technologies, students and teachers have found innovative ways to connect and interact with each other allowing them to move beyond substitution and redefine learning. When teaching online, this is as, or even more, important. Therefore, it is important to consider incorporating tools and techniques with careful planning on content, pedagogy and assessment and intentional use of online technologies that help teachers and students connect giving the best learning experience. In this section, a list of good practices has been identified for online teaching and learning in the context of TNE based on experiences (mostly coming from discussion and teaching-related meetings, e.g., weekly Teaching Hub):

- **Managing your technology:** Use multiple monitors, if possible, turn off your computer's notifications (the worst is getting email/calendar/slack/etc. notifications in the middle of lecture), i.e., close or disable interruptive notifications. Since online learning involves technologies, it is important to start any session early, e.g., checking the connections, audio, video, etc. to avoid unexpected situations.
- **Speaking:** When you deliver lectures and if you use a microphone, it is better to keep the microphone further from your mouth and speak louder so that it does not amplify the sound of your breath giving you more confidence.
- **Holding students' attention/Better clarifications of terminologies:** Learning achievement is greatly influenced by individual learners' tendencies together with communication and interaction with others [44]. For example, students can get demotivated so easily in any synchronous live session. To hold students' attention, a live lecture can start with a show and tell while making a short video for asynchronous learning. Moreover, unfamiliar terminology can de-motivate students and it is always better and/or more engaging for students if lecturers describe complex terminologies and problems with examples. It is recommended to use readable font sizes (classroom projectors/monitors vary classroom to classroom), to maximise the chance that everyone in the classroom can read the slides.
- **Synchronous vs asynchronous teaching and learning:** It proved to be good practice to provide lecture notes/slides in PDF formats before a scheduled class, then short pre-recorded videos of the lecture notes made available to students asynchronously. These would be followed by synchronous live sessions that should not be a repetition of lecture slides, but should instead complement these by explaining concepts in more detail, giving illustrative examples, and supplying tasks for the students to engage with. The use of Q&A slides, such as Mentimeter, and short quizzes should be encouraged. Depending on cultural sensitivities, questions from students could be posted anonymously. On the other hand, the use of practical tasks for students to undertake in live synchronous sessions, where relevant, encourages student engagement.

Although the physical presence of the teacher in the classroom is not possible, the use of Teaching Assistants in the classroom during live synchronous sessions "in loco teacher" helps to smooth the transition between the teacher's delivery and the student engagement.

- **Interactivity in asynchronous teaching and learning:** Supporting student engagement is one of the key challenges for designing asynchronous learning, but asynchronous activities can still be highly interactive and engaging experiences. It is important to stress that lecturer's engagement and visibility are also hugely important for student engagement, as are opportunities for students to work together and collaborate. For example, discussion forums are a common asynchronous activity, and they enable students and teachers to come together asynchronously to discuss, share information, exchange ideas, give feedback and collaborate with the following added benefits:
  - Offering inclusive teaching methods as students who feel less able to participate in face-to-face group discussions may feel more confident in contributing.
  - Allowing students time to reflect and consider before they respond to others.
  - Enabling students to give and receive peer feedback on their work or ideas.
  - Allowing students to lead to collaborative learning experiences and collaborative constructions of meaning.
  - Forums can be wholly open, or students can be divided into groups.
- **Increase students' engagement/Get real-time feedback from students:** Many tools allow lecturers to encourage and facilitate even more "lean forward" behaviours and more interaction with and among students. For example, one can use online platforms (e.g., Mentimeter) to get real-time input and a sense of students' experience, comprehension, and reactions ("reading the classroom") anonymously from students. Some best practices on improving students' engagement are:
  - Spend some time at the beginning of the lecture to identify students' questions about the material.
  - Use polls and other interactive technologies to get a sense of students' experience, comprehension, and reactions ("reading the room").
  - Open the floor with the help of interactive technologies to a general discussion of particular questions
  - Create small groups via breakout rooms for having peer discussion using platforms like Zoom, MS Teams, etc. and/or other opportunities for student collaboration using tools like Google Docs, Miro, etc.
- **Online quizzes:** Quizzes are an excellent way of engaging students, and they can offer students the chance to self-assess their progress, and/or act as a tool for lecturers to review their learning. Correct answers and feedback can be pre-programmed so that students automatically receive the answers and the reasons why they were incorrect if they get a question wrong.
- The tools can be used by students to ask questions about a recorded lecture, a reading, or following a synchronous webinar discussion. Quizzes can be a

good way to review learning at the end of a topic or week. If any of module summative assessment takes the form of multiple-choice questions or similar then quizzes also offer students the opportunity to practice for this.

### **6.3 The role of HEIs**

It is needless to say that COVID-19 is causing a great deal of ongoing stress and disruption to all our lives. The universities have also been trying to ensure that students' academic progression and achievement are not disadvantaged by the current crisis. Therefore, the first and foremost task for HEIs is to take extra precautions to keep students safe. It makes emergency preparedness plans for the continuation of learning by transforming face-to-face learning into online mode. This requires a lot of effort from the institution's point of view ranging from the change/mitigation of policies and procedures (e.g., teaching, learning, assessments, etc.) to the adaptation of new (often unknown) teaching and learning methods and technologies, which may result in unexpected outcomes. For example, the unexpected shutdown of the computer servers of the online learning platform due to a large number of users [45]. Moreover, some online education platforms have good features such as breakout for small group discussion while others may lack such important features. Most universities had to change their assessment policies - specifically, adopting an alternative assessment and relaxing or mitigating Extenuating Circumstances (EC) (e.g., students can self-certify for EC, automatic approval, etc.). The alternative assessment adopted can be varied from university to university and here are some common assessment formats: take-home exams, online proctor exams, long-period online exams, i.e., answering the paper within the normal exam time, but students can submit their answers within the allocated long hours window, etc. There are also other measures taken by HEIs such as communications and compliance that universities offer frequent communications for COVID-19 guidance and measures to enable students to continue to engage effectively with learning and assessment. Therefore, HEIs must have alternative plans (Plan B/Plan C) for any unexpected issues in advance and students must also be well informed about those plans with proper instructions.

### **6.4 The role of regulatory bodies and agencies**

Quality assurance and regulation of TNE have become an important element for both host and foreign institutions to ensure the quality of TNE programmes in an acceptable standard. Most TNE host countries have regulatory bodies and established procedures for assuring quality [13]. For example, the Malaysian Qualification Framework (MQF) implemented by the Malaysian Qualification Agency (MQA) is used as a basis for quality assurance of higher education in Malaysia as a host country while the quality of UK TNE is demonstrated through independent evaluation by the Quality Assurance Agency for Higher Education (QAA) [46]. While foreign countries are encouraging and helping their universities to expand their TNE activities, many countries have also started monitoring those TNE activities to project their higher education reputation [28]. For example, the UK's QAA has been conducting in-country audits of UK TNE operations since 2009 across a range of countries<sup>4</sup>. It is believed that the export success of UK higher education is critically dependent on explicit and visible confirmation of rigorous internal quality assurance, external quality evaluation and careful regulation. The method for the quality evaluation and enhancement of

<sup>4</sup> <https://www.qaa.ac.uk/international/transnational-education>

UK transnational education was commissioned by Universities UK (UUK) and GuildHE, and the Quality Evaluation and Enhancement of UK Transnational Higher Education Provision (QE-TNE) demonstrates the commitment of UK higher education to deliver high-quality TNE experiences for students [46].

## **7. Challenges and opportunities of TNE**

Education sectors have seen a dramatic digital revolution in recent years due to the COVID-19 pandemic putting universities in change and innovation mode. Over the course, individuals from all stakeholders (regulators, higher education providers, academics, students, and families) have faced several challenges, and one of the great challenges in TNE programmes is, in most cases, the rapid change in the delivery mode, which completely relies on technologies [47], and adjusting with the technology is a challenging task for both students and teachers. In this section, several challenges that are faced by TNE stakeholders are identified and briefly explained below.

### **7.1 Technological challenges and adjustment**

In recent years, there is a significant advancement of educational tools and platforms, thanks to the fast technological advancement, that are readily available to adopt within a short time. For example, cloud-based teleconferencing with video platforms includes Zoom, Microsoft Teams, Blackboard Collaborate, etc. Since TNE students and staff require to engage with remote online education from home via educational tools and platforms, there can be significant challenges for both students [43, 48] and staff if a high-speed and uninterrupted internet connection is not accessible. Overall, this is a common problem for any remote online education resulting in a serious concern for the education providers to ensure the inclusive education provision. It was found [32] that many TNE students have limited access to a suitable internet connection and their learning experience is unequal.

### **7.2 Student expectation and support**

TNE students are often used to a particular delivery mode, and significant changes are being made, which are essential tasks during the shift to online education, causing disruption to student learning [49]. Therefore, the measures taken by the institution and/or any changes must be communicated frequently with students and additional support must be ensured so that the learning outcomes can be achieved, and student expectations are met. It is even more important than usual that providers engage with students to ensure that any changes to delivery and assessment are communicated.

### **7.3 Different time zones and well-being**

During the pandemic, most students travelled back home due to the closure of universities, and it was important for the best interest of students' physical and mental wellbeing resulting in students being started attending online learning activities in different time zones. This was an important issue to consider before transforming traditional face-to-face learning into remote online learning. For example, it is not possible to deliver most learning activities in synchronous mode like in normal circumstances [35]. There are many ways [50] to blend the traditional face-to-face learning activities in the remote online format and many

universities have adopted a blended approach consisting of synchronous and asynchronous modes of delivery.

#### **7.4 Learning and inequality**

Authors in [51] have compiled many relevant kinds of literature to identify the learning gaps due to several factors. There is much evidence that learning loss can be severe during the COVID-19 crisis exacerbating educational inequality [52] as according to the “faucet theory” [53]. Similarly, COVID-19 and the closure of universities may not affect students equally. In the case of remote online education, many TNE students have limited access to necessary technical equipment, a suitable broadband service, or perhaps facilities such as a quiet room with a desk and a computer.

One of many important challenges for the sudden forced switch to online education is learning and inequality. The fact is that not all households are equally prepared to move on to online education with a personal device and a stable Internet connection as necessary requirements not to fall behind. These factors have made the digital divide between those who can meet the new basic needs of the contemporary world and those who cannot, which is wider than ever. Such access inequalities are established on attributes of the individual (e.g., technology skills), contextualised social realities (e.g., gender discrimination), and economic circumstances (e.g. the ability to afford relevant technologies) [40]. Given this mixed situation, personalised blended learning that takes these factors into account is the ideal compromise for a post-pandemic society.

#### **7.5 Addendum to the TNE partnership agreement if required**

Depending on the TNE partnership agreement and delivery models, there might be some legal bindings in terms of changing the delivery modes though most TNE programmes have already adapted an alternative delivery model during the COVID-19 pandemic. The rapid temporary change in the delivery mode for any TNE arrangement was required for the continuation of education. However, an important advisable comment was made by authors in Green et al. [42] that TNE partners should review the terms of the overarching legal agreement and any operational agreement, which articulates the roles and responsibilities between both partners: firstly, to check whether these formal agreements allow any changes in the delivery mode or not; secondly, to introduce addendums to the agreements in line with their usual approval processes for permitting the necessary changes adhering to any emergency regulations (e.g., COVID-19). The emergency regulations can be adapted for their operating agreements as a consistent plan in the shorter term, and this may require substantial adjustments in terms of teaching, learning, assessment, student support as well as adapting and accessing technologies.

#### **7.6 Spaces for wellbeing (impacts of student and staff wellbeing)**

There is an increasing pressure to perform well academically and to sustain in an increasingly competitive environment contributing to suboptimal wellbeing [54]. Higher education students also have to cope with a new learning environment due to the COVID-19 pandemic, and the dramatic shift in the learning environment is the biggest contributor to poor wellbeing for students. A lack of physical contact with academic staff, coupled with their reduced capacity associated with the technological shift, has put students under increased pressure to meet deadlines without the typical access to support that they would normally experience (Zhai and Du, 2020).

New research conducted by Pearson and Wonkhe suggests that an emphasis should be given on improving online learning, which will have the most direct impact on students' future wellbeing, engagement, and motivation [55]. It is suggested that it is not only about the result of students being at home and the concerns over Covid-19, but also the way that universities have managed interactions and online learning has increased their anxiety and harmed their wellbeing [55].

## **7.7 Opportunities**

COVID-19 has tested the capability of the current education systems and challenged us in many ways. With the forced adoption of new ways of delivering teaching and learning, COVID-19 is also showing us the value of online education and the effectiveness of technology-assisted learning. It brings confidence and resilience to the education system, which has gained the capacity to deal with any future emergencies. The blended and/or mixed-mode learning approach is considered a viable model for the future of education. Therefore, it is the ideal way to prepare students, who are employable, locally and globally, for a world where knowledge is not a fixed set of facts.

## **8. Future of HE and TNE**

Education is a core aspect of the United Nations (UN) Sustainable Development Goals (SDGs), and is considered essential to their success (UN, online). Likewise, transnational education (TNE) plays an important role for SDG 4 (i.e., “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.”) in the pursuit of sustainable development.

Before COVID-19, online learning was often considered as an afterthought, or an optional extra and face-to-face education has always been the norm for university programs. However, like many other sectors that have evolved to support remote workers and colleagues working from home, many universities have reconsidered their use of technologies to do the same, offering a truly blended approach to learning, to survive. In today's world during COVID-19, education is not limited by where or how you learn, what matters is that you continue to learn regardless of the pandemic. As such, universities around the globe have developed and adopted blended learning approaches to learning, making use of technologies, thanks to the recent advancement of computer science, information technology, computing, telecommunications, and other technological sectors.

Now, the questions about the post-COVID landscape of the higher education sector - What would be the teaching and learning delivery model when face-to-face teaching resumes? Whether going back to what it was before or will a new delivery model be introduced? Is a higher education revolution on the way due to COVID-19? What should universities be doing to minimise similar risks in the future, and what will that future look like for higher education? [56]. There has already been a lot of effort and investments placed for the adoption of the new education model and there is also a growing discussion ongoing about the future post-COVID-19 model of higher education whether it is to review their course structure and content, a fundamental revision of strategic priorities, a redesign of universities' core activities and so on [41, 57]. It is speculated by experts [58] that a post-pandemic recession will accelerate the latest shift away from high-cost study destinations towards more affordable locations nearer to students' home countries. This means the TNE programmes, which often cost less fees as compared to the fees required to pay in the West for the same programme, would particularly be attractive to those

from low- and middle-income countries. Since most TNE programmes include the face-to-face element of TNE provision, which is essential to many students, it may be more appropriate to implement the mixed-mode education provision as a future pandemic-proof TNE solution with investing in online technologies and the development of online pedagogies. It is now clear that online pathways to overseas degrees are likely to expand, primarily in the form of blended learning at branch campuses and partner institutions [58].

While it will take another year to fully grasp the impact of the pandemic on international enrolments in traditional destinations, the short-term impact appears not to have been as bad as was first feared. An audience poll during a recent Times Higher Education session on international recruitment, for instance, found that international demand for UK university places has dipped by less than 25 per cent while most TNE programmes are overwhelmingly receiving students. What is clear is that universities need to consider more holistically their role as global social enterprises with their key remit being to address sustainability and employability challenges [41].

## 9. Conclusions

With efforts to prevent the spread of COVID-19, the global education system including transitional education (TNE) has been transformed with online education becoming the primary means of instruction. However, there are several challenges to be faced. The technological challenges are mainly related to the unreliable Internet connections for thousands of students and staff being simultaneously connected and the lack of digital devices for many students. This chapter presented a detailed discussion about COVID-19 and its impact on transitional education. It may be too early to say how students and teachers will cope with online learning and what future impacts it will have in terms of, e.g., student employability. All stakeholders such as academics, students and their families, enterprises, experts, universities and Policymakers should collaborate closely to develop accessible and inclusive learning environments, educational resources and tools are additionally able to maintain the sociality, inclusiveness and accessibility of education. At the same time, it will strengthen the capacity of universities in terms of preparedness for future emergencies. Moreover, future research will further analyse students' perspectives, assessment, student experiences, and employability for graduates in COVID-19 and compare them across different TNE models and delivery modes, to provide a more comprehensive view and more detailed results.

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