INCLUDE

KNOWLEDGE PLATFORM ON INCLUSIVE DEVELOPMENT POLICIES

International partnerships and institutional collaboration for capacity development in higher education (HE) and TVET in Africa

Part 1: Literature review

Intro

The Orange Knowledge Programme (OKP) of the Dutch Ministry of Foreign Affairs (MFA) expires in 2023, and will be succeeded by a new programme focused on strengthening higher education (HE) and technical and vocational education and training (TVET) in Africa, the Middle East and in parts Latin America and Asia. In addition to OKP-specific evaluations, this is a good moment to reassess the broader nature, value and purpose of donor-funded interventions in HE and TVET. This will help to design a programme which fits the current global context and contributes towards building more effective and resilient education systems. This is especially important given the shifts in the HE/TVET landscape and national development priorities due to COVID-19.

This report reviews capacity development programmes in HE/TVET, with a focus on Sub-Saharan Africa, given the region's priority in Dutch development cooperation and the focus and expertise of the INCLUDE platform and network. In terms of scope, this is by no means a thorough analysis of all programmes and collaborations in the region. Rather, the goal is to provide insight into the main debates surrounding these partnerships and programmes (Part 1), support these with evidence and examples, and capture voices and perspectives from African institutions on what is needed moving forward (Part 2).

Methodology for Part 1

Part 1 consists of a literature review of the major trends and outcomes of international collaboration and capacity development programmes in HE/TVET in Sub-Saharan Africa, with a few examples from other regions. The review is structured according to specific questions laid out by the Social Development Department (DSO) at the Ministry of Foreign Affairs of the Netherlands.

The report contains background information on the following topics:

- HE/TVET trends in Africa
- Place of HE/TVET in development cooperation
- International partnerships in HE/TVET
- Defining capacity in the context of HE/TVET
- Trends in collaboration for capacity development in HE/TVET

The following main questions are then addressed:

- What are the main objectives of capacity development programmes in HE/TVET?
- How are partner countries chosen?
- To what extent is country context considered?
- To what extent are partners and participants involved?
- What are the major achievements of these programmes?
- How (and to what extent) is inclusion incorporated?
- What are the broader impacts on development and society?
- What are some of the main obstacles and challenges?
- How is sustainability of impact guaranteed?
- How can programmes be considered holistically?
- What changes have emerged in light of COVID-19?

The sources used for analysis include peer-reviewed journal articles, programme evaluations (both internal and external), and reports from organisations working on education in Africa and other developing regions. Literature sources were acquired through an online search and recommendations by INCLUDE members and participants from the interviews. The majority of sources were produced in the last ten years to gage the most recent thinking on this topic. The relevant information was extracted from each source to help answer the research questions. Key programme documents often provided information on the objectives and results of capacity development projects, but sometimes the process (such as the degree of local partner involvement or inclusion etc) had to be deduced or found from separate evaluations.

The literature sources were written in English. This could be a shortcoming of the report, since omitting, for example, indigenous, Francophone or Arabic perspectives of capacity development programmes could yield a skewed impression. It did not, however, limit the research to programmes from English-speaking donor or beneficiary countries. The examples used are mostly from donors who have historically invested heavily in HE/TVET (in absolute terms or as a percentage of their foreign aid, education budget, or GDP), including the UK, Germany, France and Japan. The USA, Sweden and Norway have focused more on basic education, but do appear. Beneficiaries lie mostly in the Africa region due to the group of focus countries in the Dutch development cooperation efforts.

Background

Defining HE and TVET

Traditionally, TVET spans education or training that is technical in nature and aims to provide skills related to a hands-on profession, while HE traditionally offers more academic qualifications and is viewed as higher-skilled. The distinction between the two has become blurrier in the last two decades (partly due to the blend of hard and soft skills required in the modern economy/labour market), with HE institutions offering more technical skills and TVET institutions offering more knowledge-based and high-skilled diplomas. However, for the purpose of this report, we will keep the distinction where HE is more academic-oriented and TVET is more practical/profession-oriented.

HE/TVET trends in Africa

Africa's higher education (HE) landscape has changed dramatically over the last half century. In 1960, 27 countries on the continent had no registered university, and South Africa was the only country to have more than 10 universities (see Africa Knows! country profiles). In 2020, every country had a knowledge institution on the map, with 40 countries having more than 10.

Despite this progress, Africa still lags behind other continents in terms of the quantity, quality and output of HE. Gross enrolment rates in tertiary education are low, averaging 7.1% compared to the global average of 25.1% (European Commission, 2020). Curricula have not been sufficiently updated or made to match national skill needs, and the system lacks the volume of qualified teachers necessary to meet the demand for skills (Alam et al, 2013). There are, on average, 198 researchers per million inhabitants (for comparison, Chile has 428 and the UK 4000), and most African countries invest less than 0.5% of their GDP on R&D, which is below the African Union target of 1% (DFID/HEART, 2019). As a result, no African universities currently rank in the top 100 higher education institutions worldwide, according to the Times Higher Education World University Rankings 2021, and Egypt, Nigeria, Uganda and South Africa are the only African countries with universities in the top 500 globally (with South Africa having 3 in the top 300). [1]

The TVET sector has also grown exponentially (though it is hard to find statistics on the actual scale of TVET due to so much of it still being informal), but faces its own challenges regarding quality and reputation. TVET-to-secondary enrolment (the share of students who attend secondary education that go on to pursue TVET courses for further education) averages 10% in Sub-Saharan Africa, with some countries even lower (Ghana just 5%). TVET also lacks nationally and internationally recognised qualifications and quality assurance mechanisms, and is not seen favourably by youth across the continent.

Place of HE/TVET in development cooperation

HE has regained focus in development cooperation after decades off the agenda (see Boeren, 2014; Semali et al, 2013; Léautier and Mutahakana, 2012). In the 1960s, following independence, universities were seen as the key driver for Africa's development. The economic downturn and socialist policies of the 1970s placed the burden of HE costs on institutions and individuals which led to uneven access and quality, and from the 1980s/1990s, a focus on basic education in the donor community crowded out investments in tertiary education systems. In the 2000s, the role of tertiary education in Africa's integration into the global economy was re-examined, sparking a revival in interest, with HE again being seen as critical to Africa's economic and social development (Clifford et al, 2012; Léautier and Mutahakana, 2012).

HE is now viewed as important for finding locally-driven solutions to the problems that developing countries face, including unemployment, the green energy transition, climate change and security. Universities can provide the space for re-skilling, retooling and continuous learning; they can (in theory) adjust their outputs to better match demands, and bridge the performance gap between the public and private sector. HE is also seen as key for developing the skilled leaders and innovators required for transformation (both within and beyond the education system), and HE institutions have a role to play in generating a culture of social equality, tolerance, and environmental sustainability. These factors are seen as fundamental for reaching the SDGs and Agenda 2063.

TVET has also gained attention (from donors and increasingly African governments) due to the practical knowledge, skills and technology that support the higher value-added productivity needed to compete in current and future economies. TVET is well-suited to the challenges around youth employability, economic transition and digitalisation (UNESCO, 2015), and is seen as particularly relevant given its links with entrepreneurship and the informal sector which dominate African economies. The UNESCO-UNEVOC (global

[1] The World University Rankings scores universities across all their core missions: Teaching; Research; Citations; International outlook; and Industry income. The teaching indicator looks at the learning environment (course reputation, staff-to-student ratios, doctorate-to-bachelors ratio); Research assesses the volume, quality and income of research output; Citations pertains to the research influence; International outlook considers the proportion of international staff, students and collaborations; and Industry income measures knowledge transfer.

network of TVET institutions) 2015 recommendation urged member states to '*build the necessary institutional capacities to ensure the relevance of TVET to current and evolving needs in the world of work, nationally, regionally and internationally, including those implied by the transitions to green occupations, economies and societies*' (UNESCO, 2020).

TVET keeps emerging at the top of global, regional and national debates and development agendas. It features high in the strategic and operational priorities of regional economic communities such as the African Union, the Caribbean Community (CARICOM) and the European Union, as well as multinational groups such as the G20, the OECD, the ILO and UNESCO. The African Union's Second Decade of Education specifies TVET as a priority area for investment for Africa (UNESCO, 2015). In its 2020 communication document to the European parliament, the European Commission proposed scaling up EU-Africa academic and scientific cooperation, including TVET, and enhancing skills development as one of the 10 priority areas for EU-Africa partnerships (European Commission, 2020).

International partnerships in HE/TVET

The concept of partnership, and particularly institutional partnership between education, training and research establishments in Europe and Africa, is complex and has been interpreted in many ways. In fact, the term 'partnership' has been used so frequently that almost any relationship between educational institutions, regardless of its scope, has come to be described as such, which has led to some miscommunication around roles and expected outcomes (Boeren, 2014).[2] Moreover, despite efforts to find a common definition, there are few systematic and critical studies examining the changing dynamics of partnerships in the HE/TVET sectors over the years.

One of the common assumptions of bilateral or multilateral relationships is that they are based on equality and reciprocity, with academic institutions and other actors agreeing to cooperate to advance their mutual interests or shared vision (Semali et al, 2013). In reality, the interests or visions of different stakeholders are not always aligned, and partnerships can exacerbate prevailing asymmetries in power, resources and capacities (Downes, 2013). In any programme, there should be a clear idea of what that partnership means, and what the expectations are, for each actor. It is imperative that partners openly address issues of power in terms of ownership, decision-making, funding, planning and evaluation. Partnership processes could benefit from strengthening cross-cultural communication and more continuous and open exchange to avoid misleading assumptions. This is not unique to the education sector, indicating a need for greater learning around strengthening and equalising international partnerships more generally (SDG 17).

Partnerships and capacity development programme in HE/TVET must also be considered within the broader context of Europe-Africa relations dating back to colonialism and beyond.[3] The continued framing as the 'global South' or 'developing countries' within development cooperation fuels a degree of paternalism, with recipients of funding and knowledge depicted as having little to offer in return. This perpetuates views that African HE/TVET systems are inferior or unattractive for investment, when in reality, many African education institutions will become (and have already become) strategic partners in forming global knowledge networks (Boeren, 2014). More work is required in the international community to put African HE/TVET on the map through more equal collaborations, and to shift from this one-way structure of donor support to more circular flows of knowledge.

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[2] Definitions of partnerships range from their immediate goals (internationalisation, institutional linkages, academic collaboration), to a process for generating joint development solutions, to a means of empowerment, sovereignty, and capacity development for institutions (Semali et al, 2013).

[3] This topic of decolonising education and strengthening/celebrating local knowledge systems was central to the Africa Knows! conference led by the African Studies centre in December 2020-Februrary 2021.

Defining capacity in the context of HE/TVET

There is still an incomplete understanding of the notion of capacity, and a lack of clarity on which aspects of capacity HE/TVET programmes are seeking to develop. This is reflected in the fact that most donor programmes do not specify a definition anywhere in their programme documents or Theories of Change. It could be due to the multitude of existing definitions, many of which are vague and overly-theoretical, which make it difficult to draw clear linkages between finite programme activities and broader capacity development outcomes. A clearer grasp of capacity and its dimensions within the context of HE/TVET is needed before we look at the options for addressing the needs of beneficiary countries.

Léautier and Mutahakana (2012) analyse capacity within the education sector across four core themes – transformation, implementation, innovation and research. They define capacity as "*having the aptitudes, resources, relationships and facilitating conditions required to effectively achieve institutional goals*". The authors distinguish between:

- Transformative capacity: generating people with the competence and motivation for transforming sectors (including education itself) and societies through leadership
- Implementation capacity: having the right curriculum and pedagogical tools to enable high quality teaching, generate desired skills and produce good learning outcomes
- Innovative capacity: challenging learners to experiment and think critically through theoretical and practical approaches
- Research capacity: having the network, equipment, access to internet, databases and journals, and research skills to generate and disseminate knowledge

Another common way to conceptualise or classify capacity in HE/TVET is by function (for example, teaching, research, administrative or technical capacity) (Semali et al, 2013). This conceptualisation, linked to the implementation and research capacities described by Léautier and Mutahakana, has the advantage of being more tangible and practical in terms of allocating resources and targeting activities to enhance and measure specific skills. UNESCO (2015) adds that capacity development is not just about focused, technical solutions, but also about developing continuous social change trough greater awareness of cultural aspects and attention to the sustainability of HE/TVET systems themselves. This is linked to the transformative and innovative capacities from Léautier and Mutahakana's framework, and could be thought of and addressed as a separate function.

A final way of thinking about capacity is to distinguish between individual capacity and institutional capacity. The former relates to developing staff, lecturers, TVET practitioners etc. and the latter to developing resources, infrastructure and procedures (or ways of working). This is more in line with common World Bank definitions of capacity development, which have changed in their wording over time but all have at their core the development of skills (people), practices, and organisations/institutions (structures) at the same time, in order to solve a specific set of problems and generate sustainable change at the sectoral/national level.[4] This way of looking at capacity development can be broadly applied across all sectors, and is useful when it comes to creating holistic programmes that are set within the wider education and national contexts.

There has been an important shift in terminology over the years, from 'capacity building' to 'capacity development'. Capacity building can imply that external institutions are coming in to build capacity from scratch, whereas capacity development implies enhancing what is already there and is more conducive to equal partnerships and institutional support rather than paternalism.

[4] See the World Bank's evolving definitions of capacity building.

Trends in collaboration for capacity development in HE/TVET

Rapid growth in the demand for education in Africa has occurred during a period of dwindling government budgets, resulting in a decline in the quality of public education and requests for external assistance. Partnerships have been sought with universities in North America and Europe to facilitate the necessary reforms to meet the needs created by increased enrolments (Semali et al, 2013). There has now been over 60 years of educational collaboration programmes, including a number of arrangements such as public-private partnerships, distance learning and cross-border provision and consortia (Clifford et al, 2012). Partnerships in TVET are a much newer phenomenon and much less diverse in terms of their set ups, mostly focusing on short courses to provide industry-specific skills.

Cooperation between academic institutions in Europe/North America and institutions in Africa is undergoing an evolutionary process, from pure capacity building to equal partnerships, from social commitment to matching interests, and from specific needs to global strategies (Boeren, 2014). This evolution is due to two factors, namely, changing views on development cooperation, and changing circumstances of HE/TVET institutions, both of which lean towards empowering local actors and finding locally-driven solutions to development challenges. Momentum is building for new measures to strengthen and sustain the capacity of African institutions to foster economic growth and transformation. Moving forward, the prime driver will be African governments investing in their own future. An important question to ask is what this means for donor programmes and international cooperation – *in what ways can they support this shift, and how best can they do this?*

The types and structures of capacity development initiatives are changing as a result of these shifts, and they require proper planning. Assistance used to focus predominantly on strengthening undergraduate teaching capacity, while more recently the emphasis has shifted to graduate training, continuing professional development and strengthening research capacity (Downes, 2013). The most common modalities for donors until now have been joint degree programmes, staff training and offshore campuses, but trends are moving towards online platforms. While all of these can be effective, they also present different outcomes and challenges. We are seeing more diverse forms of partnerships, such as those driven by host country governments, a shift to emerging economies, and a resurgence in not-for-profit campuses in addition to a large number of for-profit private initiatives (Wilkins and Juusola, 2018).[5] It is important to think about how these programmes and initiatives fit together (by communicating both within and across donors) to contribute towards strengthening HE/TVET systems.

[5] There are more and more examples of donors financing joint elective programs for universities run by external organisations, e.g. the PhD program run by the African Economic Research Consortium (AERC), the specialised skills programs such as the Economic Policy Management (EPM), the Collaborative Masters in Agricultural Economics (CMAE) and Public Sector Management Training Program (PSMTP), and training and refreshing programs like the Macroeconomic and Finance Management Institute (MEFMI), and the West African Institute for Finance and Economic Management (WAIFEM).

Key questions

What are the main objectives of capacity development programmes in HE/TVET?

In a broad sense, the aim of international cooperation in HE/TVET is to strengthen the ability of partners institutions to offer high quality education and training to a broad segment of society, help meet local development agendas and, along the way, contribute to global sustainable development. We can distinguish between internal objectives (learning/skills, institutional capacity) versus external objectives (broader development, global positioning).[6] We can also distinguish between short-term and longer-term objectives of programmes. Particularly since the COVID-19 pandemic, the focus has shifted towards the latter. The Global Partnership for Education talks about not just transferring skills and knowledge today, but also having the tools and networks to generate resilient education systems and become more integrated with other sectors.

The specific objectives and motives can differ between stakeholders (e.g. the various partner institutions, donors, governments and beneficiaries), and are important to understand and align. For example, the goal for beneficiary institutions is often to provide students with specialised and durable skills, increase innovation, and create and use local knowledge, while students may seek the fastest route to getting a job. Donor country institutions may want to internationalise or to attract investment and human capital, while donor governments may want to strengthen international relations. In cases where motivations are not complementary, finding a path of mutual interest and adapting programmes to meet the objectives of the different stakeholders is crucial. This is where issues of power come into play – it is necessary to involve actors who represent the full range of interests in order to balance incentives and outcomes. [7]

There is a growing trend in pursuing collaboration which serve partner countries' priority development sectors, in order to meet national socio-economic needs (see France's donor strategy for HE/TVET). Objectives should always be linked to the types of capacity trying to be developed. 'Glocalisation' (a mix of globalisation and localisation) is now more desirable than 'internationalisation', as it allows programmes to be context-specific whilst bringing in good practices from elsewhere. Good examples of this trend are:

- The African Centres of Excellence (ACE) impact development project. Set up in 2018 by the World Bank and the French Development Agency (AFD), the programme has 43 ACEs in 11 countries which seek to strengthen the capacities of participating universities to deliver quality training and applied research in thematic areas that address specific regional challenges.
- The Better Education for Africa's Rise (BEAR II) programme (2017-21), led by UNESCO and the Republic of Korea, supports five Eastern African countries to improve the relevance, quality and perception of their TVET systems (directly in line with SDG 4). BEAR II builds on national and regional development plans and priorities of each participating country, with the goal of giving young people a better chance to access decent employment and/or generate self-employment.
- The PASET Initiative on Regional TVET Centres of Excellence (EASTRIP), a World Bank financed project running from 2019-24, is developing specialised regional flagship institutes in 16 selected TVET institutions in East Africa, with the objectives of training technicians and faculty, developing industry-recognised short-term training,

[6] Examples of these in the donor community would be Japan, who tends to focus more internally on strengthening domestic and partner institutions in HE/TVET, and Korea, who tends to focus more externally on entrepreneurship and training programmes for academia-industry linkages (Lee, 2020).

[7] On the one hand, HE/TVET programmes risk being biased to serve the interests of Northern institutions who often control the flow of resources. Conversely, efforts to prevent this tied-aid by focusing only on the objectives of Southern institutions actually decreases the incentive for donors to invest in these programmes.

targeting regional priority sectors, including transport, energy, manufacturing and ICT, and providing support on quality assurance and curriculum development to promote regional mobility of skilled workers.

Southern partners tend to value the concept of partnership above that of pure technical assistance. Technical assistance gives them facilities, curricula, infrastructure and staff training. Through partnerships, they get access to international networks, participation in dialogues to voice their needs and experiences, and publication possibilities. These aspects of partnerships are important for motivating staff, putting institutions and scholars on the map, and attracting other interested partners, researchers and students, and are also much more durable and self-sustaining. Including more of these demand-driven objectives in programmes can help to achieve buy-in and effectiveness.

How are partner countries chosen?

Donors base their choice of countries on a range of factors, including risk, access and politics. Some donors decide based on the expected outcomes, cost-effectiveness and return on investment. This stems from the intense pressure for accountability and monitoring of donor funds. Initiatives that fail cause reputational and financial damage for home country institutions, which leads them to prioritise lucrative or less risky partnerships and initiatives. Another factor is the stringency of regulations in the partner country. For example, foreign universities in the UAE and Qatar can operate fully commercially as there is no bar on fees, ownership, and repatriation of profits. Over 400 different undergraduate and postgraduate programmes are offered there by universities mainly from the USA, UK and France (Alam et al, 2013). Donors may also consider the ethics or political implications of collaborating in countries that limit or have questionable stances towards civil, political and human rights, as well as academic freedom (Wilking and Juusola, 2018).

A large share of partnerships are based on existing relations and previous partners, which is good for trust-building but can exclude new potential partnerships. The DFID (now the FCDO) Strengthening Research Institution in Africa (SRIA) programme operates in countries where there is existing research capacity and where there is considerable UK ODA research activity (DFID, 2019). All projects in the German DAAD Exceed programme had prior links with the majority of their partners. Although this is due mostly to trust in what works and efficiency reasons as opposed to intentional exclusion, it can prevent new-comers from benefiting from capacity development programmes.

Partner countries are often selected to align with donor frameworks for development cooperation, in terms of thematic areas and focus regions. Since priorities can change quickly with new governments or revised development cooperation strategies, this has sometimes caused a lack of continuity. It is also not always a demand-led approach, since the most needy countries overall may not be the most needy in terms of HE/TVET capacity. The UNESCO Capacity Development for Education (CapED) programme overcomes this problem by focusing mostly on the group of Least Developed Countries (LDCs), but with additional focus on countries furthest away from achieving the SDG4 targets, as well as on fragile countries in emergency situations or recovering from conflict or disasters.

A study by Semali et al (2013) found that project success was not dependent upon choosing a partner with more resources, but actually obtained through partnering with more needy universities over the longer-term, and spending more time to understand national and institutional needs and limitations, develop personal relationships, and form solutions collaboratively. The need to focus on longer-term strategic partnerships for supporting global knowledge networks and collaboration in other areas has been strongly recognised. There is also a need to take on higher risk projects, involving partners with weaker education systems or no previous partnership experience in

this area, but who specify a clear demand and willingness to cooperate. Good examples of demand-led interventions are the COST action research network programme, where institutions apply together for funding for partnerships in science and technology research, and the ACE programme by the African Association of Universities (AAU), where the Centres for Excellence were competitively selected through an open, rigorous, transparent and merit-based selection process.[8]

To what extent is the country context considered?

Accurate and detailed assessments of national needs and resources, both within and outside the education sector, are crucial for designing and implementing effective capacity development programmes. Where no feasibility assessment is done at the proposal stage, it has proven to be a hindering factor in subsequent stages, as activities do not always generate the intended outcomes or develop the desired capacities. Where context analyses are a core activity of programming, it helps to inform better quality training and interventions. This was the case in DFID's SRIA programme, which produced high-quality inception reports on current and predicted research capacity needs for the seven SRIA target countries, as well as UNESCO and Korea's BEAR II programme, which focused on labour market and TVET curriculum harmonisation from the outset to promote strategies for youth and entrepreneurship, as well as gender and inclusion.

Capacity development programmes in HE/TVET have often not been a product of proactive planning, but rather a reaction to urgent needs or demands in the internal and external environments. The focus is sometimes more on profitability or the affordability of establishing courses or faculties, rather than reflecting local needs, values and priorities (Wilkins and Juusola, 2018). This approach is not conversant with deep contextual challenges, and ends up addressing only symptoms of much larger problems related to poverty, inequality and governance (Malette, 2016).

The shift to programmes that target priority development sectors of a country is seen as a move in the right direction. In the DAAD Bilateral SDG graduate schools programme, the thematic focus of each school was chosen based on sound context analysis. The topics of study largely correspond to priority areas defined in national implementation plans for the SDGs and national development agendas of the partner countries, namely, urbanisation in South Africa, peacebuilding in Colombia, cultural sciences and humanities in Nigeria/Ghana (including resolving conflict based on cultural knowledge systems and challenges of ethnic groups), and food security and climate change in Ethiopia. This contributed heavily to the relevance and impact of the programme.

A few other issues should be considered carefully in any context assessment in order to create up-to-date and relevant programmes:

- The availability of accurate data and country profiles. In some countries, the most recent detailed profiles are over ten years old - since then, the world has experienced a global financial crisis, a pandemic, and many other political and environmental crises, changing the landscape for HE/TVET significantly.
- Acknowledging the informal sector in labour market surveys and skill needs assessments. Africa's informal economy, full of tech hubs and start-up incubators, has different goals and required knowledge and skills which are not always considered in assessments of the formal HE/TVET sectors, but are still a common employment route for young graduates.
- Ensuring that context assessments are conducted by those who understand the local context and donor objectives. Intermediaries who have knowledge of both local

[8] The process entailed (i) call for proposals to institutions; (ii) submission of Center of Excellence proposals through their respective governments to the regional facilitation unit; and (iii) a systematic and detailed evaluation of proposals by independent African and international experts according to pre-defined criteria.

development trends and donor approaches are a good option. This can help to balance interests, include the perspectives of target groups, and match different programming options with local needs.

- Looking holistically beyond education and work to see which factors could affect programme outcomes. Labour market surveys and stakeholder consultations are useful tools to reduce the mismatch between skills and jobs and to design effective HE/TVET programmes. However, other factors, such as sociocultural norms and government policies, affect the process of transition from school to work and the uptake of donor programmes. Context assessments could therefore also look at indigenous knowledge, cultural values/ways of learning and social policies.

To what extent and how are partners and participants involved?

Participation, co-creation and equal partnerships are mentioned in nearly every discussion around capacity development, but the extent to which they play out in practice varies greatly. Partnering education institutions often give input at the design phase; the joint development of courses between institutions has been found to significantly improve the teaching-learning process within donor-funded programmes (Cantrell et al, 2010).[9] However, implementation and (even more so) evaluations are commonly led by donor country partners, and the involvement of actors outside the immediate partnership remains limited. Overreliance on (or the imposition of) external experiences and expertise can lead to local knowledge and capacity being ignored, and prevent ownership and durability of a programme (Malette, 2016). "*Europe needs to step away from the idea of being the giver of resources, knowledge and other things to Africa – moving from being a payer to a player and partner"*.[10]

The meaningful involvement of key stakeholders such as youth and learners, as well as the private sector and civil society, needs to be increased. Ultimately, if the main goals are to provide young people with desired skills and match them with employment in specific sectors, then active participation of young people, employers (including the informal sector), and development experts is necessary. More engagement with actors outside of academia could help with designing frameworks, fleshing out relevant thesis topics, getting direct feedback, and creating internship opportunities for students. TVET interventions in particular have fallen short in their representativeness, and require partnerships with diverse stakeholders who can contribute relevant knowledge and experience, share their needs and interests, and highlight the value of specific forms of TVET (UNESCO, 2015).[11]

What are the major achievements of these programmes?

Evaluations show a multitude of positive outcomes from capacity development programmes in HE/TVET, including the development of skills, increase in human capital and alleviation of pressure on education systems (Alam et al, 2013).

- Joint research activities in particular have played an important role in fostering research capacity and benchmarking quality in partner institutions, as well as increasing the reach of output and scholars (Semali et al, 2013). In Qatar, international partnerships account for over a quarter of the national scholarly research output. In the DFID DelPHE partnership programme from 2006-13, 136 partnerships for joint research led to over 650 research papers being published in peer-reviewed national and international journals, and more than 300 papers being presented at conferences.

[9] For example, the Franco-Tunisian University for Africa and the Mediterranean (UFTAM) was developed in collaboration with major French and Tunisian universities, including the University of Paris 1 Panthéon-Sorbonne and Aix-Marseille University, the University of Carthage, Manouba University and Sup'Com, and the Higher School of Communication of Tunis.

[10] A quote from Menno Bosma's speech at the Africa Knows! conference in 2020.

[11] The BEAR II programme is a unique example of a TVET programme involving close partnerships with Ministries of Education and stakeholders in the TVET sector.

- In some cases, the employment prospects and skills development of beneficiaries have benefited greatly from participation in an international collaboration programme. In the Arab Gulf region, transnational partnerships in education have been used to reduce youth unemployment and to satisfy the labour needs of the private sector (Wilkins and Juusola, 2018). In the ACE impact project (starting in 2018 and spanning 11 countries), 2264 practical internships have been undertaken so far, which have increased the employability of beneficiaries.
- Contributing to gender equality is another important achievement. Many programmes have over 50% female enrolment (DFID's DelPHE programme had 63% women) which is important for rebalancing skills and opportunities (particularly when courses are related to STEM subjects). However, more evidence is needed on whether these programmes contribute to gender equality beyond access (in terms of outcomes).

Despite some impressive outcomes, international partnerships have often failed to meet their expectations in terms of their impact on the capacity of HE/TVET systems. Léautier and Mutahakana (2012) found that policy environments for HE/TVET reform in partner countries has seen steady progress, and that organisational processes for implementation (administration and decision-making) have seen some (but not enough) progress. Meanwhile, they found that individual skills and competences, and broader development results (economic prosperity, inequality, productivity), have seen the least progress from capacity development programmes.

Substandard outcomes have been attributed to inequalities within partnerships, as well as design and evaluations which are based on Western values of efficiency, cost-effectiveness and accountability to project-specific, numerical targets (Semali et al, 2013). Results are commonly looked at in relation to quantitative measures of success such as the number of students enrolled, grades and completion rates, rather than success in terms of capacity gains at the institutional or sectoral levels, particularly in the longer-term. The GIZ have tried to improve on this by, in addition to evaluating a programme's direct impacts, efficiency and achievement of objectives, also having criteria which evaluate relevance, coordination, coherence, gender equality, and the use of ICT. It is also important when reflecting on the achievements of a programme to consider qualitative reporting styles and having results frameworks which reflect national values and goals.

How (and to what extent) is inclusion incorporated?

Low socioeconomic status, rural learners, girls/women, and people with disabilities, are underrepresented across nearly all academic/learning disciplines. Inequality analyses find that education policies and programmes in general, and those targeting HE/TVET specifically, do not cater for the poorest and most vulnerable groups. Increasing participation of minorities was an objective in only 20 percent of the World Bank's operations in education between 2003-16, which makes it hard to imagine reaching the "Leave No One Behind" principle of Agenda 2030 (DAAD, 2019).

Access to training programmes, especially high-quality courses and institutions, is still determined by access to and quality of secondary schooling and socioeconomic background. Marginalised students are more likely to attend less prestigious HE/TVET institutions, low-cost programs and distance learning platforms, where entry requirements are lower and quality is often poorer. Without conscious effort to take on disadvantaged learners, these inequalities will persist. Impact evaluations show that student financial assistance can be effective in improving transition rates from secondary to HE as well as graduation from HE (IEG, 2018). Piloted "pre-STEM" projects have helped to prepare disadvantaged but capable students for their degree studies (Cantrell et al, 2010).

Increasingly, capacity development programmes include gender equality as a key element. The DAAD SDG schools evaluation is one of many that site outcome figures separately for women and men (DAAD, 2019, pp.45), and the majority of programmes seek to have equal enrolment from male and female applicants. Programmes increasingly offer scholarships and stipends for girls and women to encourage course enrolment and completion, and develop female scholarly networks to promote participation and success.

Despite these gains, inequities remain when it comes to the inclusion of girls and women in capacity development programmes. There is still a large skew in female enrolment towards teaching and nursing courses, rather than science, technology and business subjects (Power et al, 2015; Clifford et al, 2012). Moreover, enrolment rates are not always reflective of completion or improved prospects (whether the skills they acquire satisfy their aspirations and the opportunities available to them). Gender equity remains a big problem, with several factors limiting women's participation in TVET and other post-secondary training (Mihyo et al, 2020; UNESCO UNEVOC, 2020):[12]

- A limited number of female instructors to act as role models;
- Limited facilities and high competition which often leaves women left out given their lower prior educational attainment;
- Timing (evening courses not always possible) and duration (by cycle rather than by module) of courses leads to higher drop-out rates for women;
- Lack of financial support, as well as SRHR support for counselling female students;
- The gendering of courses (male-dominated technical courses, female-dominated soft trades).

What are the broader impacts of these programmes on development and society?

Beyond the direct impacts on partner institutions and programme beneficiaries, capacity development programmes can also contribute to broader sustainable development goals. The subject-specificity of most programmes, with a focus on particular skills, creates strong linkages with economic transformation, innovation and decent employment. The DAAD Bilateral SDG graduate schools programme was directly linked to multiple SDGs through the establishment of HE schools that tackled a specific SDG. Moreover, partnerships are themselves a goal (SDG17), and HE/TVET is an ideal setting in which to formulate partnerships. South-South academic networking was a significant positive unintended consequence of the DAAD programme, and both donor and partner organisations gained experience with development cooperation.

Impacts in other sectors are difficult to measure quantitatively, but this does not mean they should not be included as a goal. Despite logical linkages, overlapping interventions and contextual changes make it difficult to attribute things like structural transformation and decent employment to capacity development programmes. However, having clear impact pathways and activities in Theories of Change can show how programmes can contribute to these wider goals. For example, the ACE project allocates 10-15% of its budget on institutional impact strengthening activities, and measures this using their own created disbursement linked indicator (DLI).[13]

The limited impact of research on policy and development has been identified as one of the key challenges for capacity development programmes. A review by DFID in 2019 highlighted a number of factors which limit the positive impact of increased research capacity

[12] Other unique and similar barriers are present for other minorities, such as learners with special needs, in the LGBTQ community, and in rural areas. For this report, the agreed focus was on gender.

[13] See Regional operations manual of the Africa higher education centres of excellence for development impact (ACE impact) programme. his indicator tracks the selection and responsibility of university leadership; institution-wide regional strategy and international accreditation; and participation in PASET benchmarking exercises.

on development in LMICs. This includes weak linkages between education institutions, private sector and governments; weak demand for evidence in policymaking; and poor alignment of research with national needs and priorities (DFID, 2019). Another limiting factor in many countries is the lack of legal and institutional frameworks for conducting research, such as quality assurance and intellectual property. Donor institutions could shift their role from supporting the production of research to supporting the communication and uptake of research as an intermediary, as is a core activity of NOW-WOTRO in the Netherlands.

What are some of the main obstacles and challenges for capacity development programmes?

It is useful to distinguish between the challenges facing capacity development programmes at the macro, meso and micro levels. This means understanding the obstacles presented by national HE/TVET (and broader educational) systems, those to do with partner institutions (their organisation and the resource-constraints they face), and those that arise in the programmes themselves (to do with how they have been designed and structured). This helps to identify which levers can be pulled (and by whom) to overcome or work around these barriers to successful programming.

1. **Barriers at the macro or system level:**

- Prior learning of students (skills barriers): Despite a boom in enrolment in secondary education in the last decade, the quality of learning has not improved to the same extent. Learners who graduate often lack sufficient skills to prepare them for HE and TVET; 13 countries in Africa still have adult literacy rates below 50%. This depletes the pool of talent to feed capacity development programmes, and creates a major barrier to inclusion, since the poorest and most vulnerable tend to have lower quality secondary education.

- Attitudes towards partnerships (assumptions): International higher education cooperation is still too often seen as a mere transfer of competencies from the North to the South, which limits the potential for fruitful and mutually beneficial partnerships. Dichotomies such as ‘north-south’, ‘low-skill-high-skill’, ‘vocational-academic’, ‘disabled-abled’, and entrenched gender stereotyping reflect rigid ways of thinking about education and society. Overcoming this requires new and extensive partnerships based on trust, mutual respect and collaboration.

- Recognition of TVET qualifications (regulation): Even if you design an extremely relevant and high-quality programme, it will not always be recognised in formal education systems and labour markets if it is not comparable to a baseline standard of performance. TVET in particular currently lacks harmonised policies and guidelines to deal with the issue of quality assurance.

- Attraction of TVET (perception): Linked to the above point, perceptions of the quality and relevance of TVET remain poor, particularly at the household level, creating a major disconnect with priorities at the global and regional levels and the need for more TVET related skills and occupations. In many countries, the public do not find TVET an attractive option, as they regard it as less prestigious than traditional HE and associate it with lower career prospects and earnings. Although attitudes are slowly changing, more effort is required to convey the value of TVET for it to reach its potential.

2. **Barriers at the meso or institutional level:**

- Under-developed partner institutions: In HE, cooperation flourishes best between more or less equal partners with mutual interests. Universities in the most needy countries need to be built up (through technical assistance) to a certain level before mutually beneficial cooperation can take off. TVET institutions in Africa often lack the base level of capacity needed for them to participate equally in partnerships and transform through capacity development programmes. These base capacities include relatively well-established networks, a sound knowledge base, a culture of learning, and formalised incentives and accountability mechanisms.

- Research infrastructure: A major missing component for institutions in Africa is the core infrastructure, including communications technology, well-equipped classrooms and workshops, library facilities, and access to online journals, to host and deliver high-quality, modern education programmes. Unless everything is funded by the donor, this creates great challenges for implementation.

- Staff qualifications: Teachers at both HE and TVET institutions commonly lack the experience, qualifications and capabilities to deliver the quality of education adhered to in international capacity development programmes. Professional development of staff (especially training TVET practitioners and transferring knowledge to younger professors) is needed particularly to ensure continuity/sustainability of programmes.

- Linkages with other faculties and the private sector: An externally funded course or project, without adequate grounding in a faculty, has very little leverage to influence the policies, activities and ways of working within a partner institution. Moreover, if partner institutions have weak ties with actors in the labour market, it can be difficult for capacity development courses on their own to drive the necessary skills for innovation, growth and transformation.

3. **Barriers at the micro or programme level:**

- Flawed ToCs (assumptions): A case study by Semali et al (2013) examined the assumptions and expectations within academic partnerships between US and African institutions, and highlighted some flawed assumptions that need revising to create progress in partnerships:
    - American academics know what needs to be researched, and the primary role of African colleagues is to carry out data collection and lobby for research permits;
    - American country scholars know the curriculum and knowledge that should be transferred to universities in Africa;
    - Top-down (from donor to beneficiary) is the way to get things done;
    - African university staff and students can mobilise sufficient funds to take care of significant project costs;
    - No equality can exist between universities in the US and Africa since the funding originates in the US;
    - Staff training can be done in short-term workshops.

- Timing relative to needs (misalignment): To strengthen capacities for partnerships, networking, research and TVET governance, or to build up a university department from scratch to the level where it can offer good quality Master's and PhD programmes, is a long-term process (over 10 years). But most capacity development programmes run for a much shorter duration (2-5 years). This does not leave enough time for impacts to be realised or for the transfer of ownership to take place.

DFID's Royal Society Africa Capacity Building Initiative (ACBI), running from 2011-2021 and supporting collaborative science and research projects in Sub-Saharan Africa, had a 1-2 year start-up period to identify and prepare research consortia (network grants for 2-3 southern institutes and 1-2 northern institutes), then each project ran for 7 years with a 1 year no-cost extension. By 2018, the programme was maturing in its implementation phase and scoring much higher (showcasing the need for time and improvements).

- Exogenous design (relevance): Programme design is still too often based on western values of efficiency, cost effectiveness, growth and accountability. Multilateral and bilateral programmes are increasingly governed by agendas that have been commonly agreed by the donor community rather than co-created and demand-led by the local institutions. This makes it difficult to ensure that the programme content and objectives truly reflect local/national development goals. Expectations that African institutions should develop in the same way or towards the same goals as European institutions are misleading and potentially damaging.

- Language of instruction (inclusion): Donor programmes implemented in Africa often offer programmes in English, with the logic that it creates a common language with the donor institution for easier implementation, allows partner institutions to engage in international research and debates, and increases the employability and mobility of graduates.[14] The counterargument is that instruction should also be offered in native languages to effectively equip students with skills and knowledge, and to develop the local language culturally, scientifically and technologically. There is therefore a tension between developing capacities for local/indigenous language and global language.

In a North–South-South collaboration between the University of Kinshasa, the University of KwaZulu-Natal, South Africa and the University of Bergen, Norway to develop health research capacity in the Democratic Republic of the Congo (DRC), inadequate English competency was a problem particularly among students, with some students reporting being unable to understand or interact in class, which negatively affected their academic performance (Horwood et al, 2021). In multiple TVET programmes implemented in Tanzania, most of the materials, manuals and training are in English, in which most primary school leavers (who still dominate TVET courses there) are not proficient (Mihyo et al, 2020). Support to develop English proficiency among staff and students is essential to ensure that the challenges do not outweigh the benefits.

- Monitoring and evaluation (learning): Programme evaluations are still too often carried out at the end of a programme, with insufficient learning as they go to allow for relevant adaptations. Moreover, the existence of benefits beyond the specific programme or institution show that indicators of success need to be broadened to include, for example, the impact on SDGs outside of education.

- Follow up (continuity): Many institutions in the South have problems retaining home-grown knowledge, with alumni and skilled professionals leaving the education sector to either work in the private/government sectors or emigrate abroad. There is also a large problem with donor country partners stopping their involvement after the programme ends, and beneficiary partners are unable to carry on the work due to lack of skills, people or funding. Efforts to improve the capacity of HE/TVET institutions may be largely futile unless there are new incentives for highly educated people to stay, and proper exit strategies are developed.

[14] In Francophone Africa, many programmes are offered in French, but this is still the post-colonial language.

How is sustainability of impact of capacity development programmes guaranteed?

Sustainability requirements are often not specified or defined in calls for donor projects, leaving room for interpretation on what it actually entails. The UNDP principle states that individuals, communities and societies are best empowered to realize their full potential when the '*means of development are sustainable – home-grown, long-term, and generated and managed collectively by those who stand to benefit*' (UNESCO, 2015). In the context of HE/TVET, this means the ability of programmes to adapt or evolve to changing resources and environments, and sustain their impact through continuation or follow up.

The literature identifies the following elements of increasing the sustainability for capacity development programmes:

- Longer-term vision: Sustainability is often a challenge due to the misalignment between long-term education goals and slow-changing research attitudes and cultures, and the shorter timeframe of capacity development projects. Having a clear vision for the HE/TVET sector within a country is important to stay on track and remain relevant. Institutions in donor countries could (continue to) broaden their strategic horizons from a short-term, profit-oriented perspective to a longer term, global perspective.

- Financial sustainability: Funding is usually allocated for a fixed term, creating a problem after the programme concludes. There is a need to develop mechanisms for longer-term funding (especially given the limited outside options for public funding in most African countries) that include transitions to co-financing or self-sufficiency (Downes, 2013). Opportunities for third party (private sector or philanthropic) or coordinated funding between programmes in beneficiary countries are particularly important to explore (DAAD, 2019).

- Continuity and evolution of partnerships: Mutually beneficial partnerships form the best foundation for sustainable collaborations. From the outset, partners should place emphasis on understanding each other's incentives and expectations, and plan and communicate effectively to ensure that all interests are represented and upheld (Boeren, 2014, Semali et al, 2013). Working horizontally to ensure knowledge exchange encourages equal status.

- Adaptive planning and phased approaches: Integrating learning into capacity development programmes can help to keep programmes relevant and effective. Building on successful methods by, for example, integrating new courses, skills and technologies. Planning for after the programme by strengthening alumni activities - instead of viewing it as a brain drain when trained professionals leave, tap into the reservoir of knowledge and networks which alumni bring for (international) economic and social development purposes (Boeren, 2018).

- Gradual transfer of ownership by engaging local partners and encouraging South-South cooperation: Committing to continued collaboration on SDG-related subjects, ensuring the adoption of scientific equipment, and anchoring new studies within partner universities, can help to shift responsibilities as capacity in the partnering institution grows, so that they undertake more managerial and programme development activities (DAAD, 2019).

- Pursuing a lifelong learning approach. Most systems assume a dichotomy between technical and university education, with a strong bias for the latter. Education is no longer a linear path, and students will increasingly cross over to technical schools to pick up skills that they did not acquire at university (and vice-versa). Moreover, HE

institutions are playing an increasing role in re-training mid-career professionals (IEG, 2018). Training in new teaching and learning methods, feedback and (peer) coaching, reward, is time-consuming but key for lasting impact (Cantrell et al, 2010). Cooperation between professional development centres, national quality agencies, and internal ministry engagement are needed to achieve this.

How can programmes be considered holistically?

Fundamental to achieving more holistic programmes is the understanding that donor programmes do not operate in isolation from the rest of the education system, society and labour markets. These interconnections mean that other factors come into play that affect programme outcomes and must be accounted for by involving a complete and representative group of stakeholders throughout the process; acknowledging and planning for dynamic and changing environments; and coordinating/integrating with development projects in other areas. Even within the same programme, the set of (and coordination between) programme components is often lacking, and opportunities for complementarity and synergy is not being fully exploited (Boeren, 2018).

One major way to plan more holistically is by positioning projects relative to other HE/TVET programmes and education systems, and fitting them within the lifelong learning framework. This includes understanding the linkages with basic education, adult education and labour markets, and expanding the policy focus towards vocational aspects of learning and training, in both formal and informal sectors, rather than just in traditional TVET. Some of the boundaries between 'academic', TVET and higher education, are likely to become much less pronounced, with more overlaps and interconnections (modules/units) (UNESCO, 2015). This requires new solutions from qualifications developers and curriculum planners, particularly around closer integration and hybridization of qualifications, programmes and education streams. Movement, entry and progression for different learners into different pathways will become very important.

Another key element to holistic planning is tying capacity development programmes more strongly to employment and entrepreneurship. Given the importance of TVET as a means of improving labour market outcomes, it is key that attempts to improve the attractiveness of TVET are located within broader strategies to ensure that TVET learning is tied to enterprise, sectoral and national economic strategies that prioritize higher-skill approaches (UNESCO, 2015). For some, this means shifting resources away from research and liberal arts towards science, technology and other practical skills required by today's employers. For others, it is more about cultivating a culture of lifelong learning.

At the same time, it is important that countries don't focus on employability as the only success indicator (IEG, 2018). The new French-Tunisian university collaboration programme has three key aspects which recognise this need for broader and more synergistic goals: scientific research, an economic and social aspect, and professionalisation. Blended forms of capacity development that consider the different dimentions of capacity are likely to be the most successful (Léautier and Mutahakana, 2012).

What changes have emerged in light of COVID-19?

Before COVID-19, the level of academic mobility and number of international collaborative projects in HE/TVET had never been higher (Malette, 2016). Almost overnight, nearly every initiative either shifted to online formats or got put on hold. The pandemic has changed the landscape of HE/TVET globally, but with particular challenges in Africa due to lower connectivity and digital skills (GPE, 2020). The impacts (especially mid- to longer-term impacts) on capacity development programmes, in terms of enrolments, modalities, and the nature and extent of collaboration, are still relatively unknown. However, there are some positive and some challenging trends that can already be discerned to help

predict the future demand and direction for these programmes, and prioritise where and how they can be of most value.

1. **Current interruptions to capacity development programmes:**
    - The pandemic has cut off the travel element of partnerships. This is seen as important for building meaningful relationships, monitoring activities and impacts (particularly qualitative monitoring and gathering beneficiary experiences), and executing certain core aspects of capacity development such as staff or institutional development, which are much harder from a distance. Although many teaching courses have effectively switched to online formats, this new way of working creates major challenges for forming and maintaining trusted partnerships (especially new ones) and co-creating programmes.
    - Research activities and research productivity have been significantly negatively affected. The Mawazo Institute, a non-profit research institute based in Nairobi, Kenya, conducted a survey in May 2020 on field disruptions for early career researchers, with 501 respondents across different African regions. 72.5% reported having lab or field work suspended, and only 38.5% worked at an institute offering e-learning (the lowest rate being 17.2% for respondents in West Africa). [15]
    - Funding priorities of many donors have changed and are less reliable. Capacity development efforts supporting far-away partners have so far tended not to be of core concern during the crisis, with development efforts in most countries being focused on inwards recovery and on positioning themselves in the emerging post-COVID global economic landscape, leading to delays in implementation. [16]

2. **Positive trends for capacity development programmes that have emerged during the pandemic:**
    - The internet and other technological tools have helped to reduce logistical challenges to programme implementation, for example, by delivering courses online and enabling communication and teamwork between partners. These tools continue to be developed and offer opportunities for expanding online delivery of capacity development programmes to potentially reach a larger and more diverse audience (e.g. programmes spanning multiple countries or regions).
    - The pandemic has deepened the connection between local problems and local solutions, which is one of the core goals of these programmes. Many institutions involved in capacity development programmes have taken advantage of this, for example, in the ACE programme, multiple Centres of Excellence got involved in public education, manufacturing protective equipment and sanitation products for local communities, and modelling/predicting the spread of the virus in their respective countries.
    - It has enabled a shift in thinking and planning, from immediate financial stability and outcomes for faculties and students, to more long-term stability and resilience of the HE/TVET system. This is relevant for capacity development programmes for donors to think about how their support can evolve over time and contribute to longer-term goals in partner countries.
    - There is a significant opportunity to strengthen alumni and diaspora activities without costly travel, thus sustaining the human capital gains developed through these programmes. Moreover, narrowed opportunities to study abroad could benefit young people and societies by limiting the impacts of brain drain and incentivising skilled professionals to stay in their home country.

[15] https://mawazoinstitute.org/publications
[16] https://www.universityworldnews.com/post.php?story=20200603075317313

3. **Challenges / risks for capacity development programmes that have emerged during the pandemic:**
    - The quality of online learning material, and the IT infrastructure to support it, is not yet up to the desired standard. Teaching material must be prepared in a way that is suitable for online delivery and user-friendly, and institutions must be able to store content online, have it accessed by a large number of users, and host different learning platforms. The sudden onset of the pandemic did not allow for proper time and planning to develop quality materials and learning platforms, and although a lot of progress has been made in a short space of time, African countries are far from having a fully functioning online education system.
    - Digital skills are underdeveloped and unevenly distributed in many African countries. Students, trainers and lecturers do not always have the skills needed to navigate online learning portals and tools, or are not pedagogically trained to deliver programmes online. (On the one hand, this is a disadvantage, but there is also significant scope for donor programmes to help develop these capacities).
    - Programmes may be even less able to reach poor and marginalised students due to issues with equality of access to digital learning. The same groups that are often targeted in capacity development efforts, such as socioeconomically vulnerable groups, women and girls, tend to be less virtually connected. There is now heightened potential for exclusion in programmes delivered online, based on differing access to electricty, internet and digital learning equipment. In addition, many disadvantaged students have missed a lot of schooling or dropped out to help support their families. These students may not return to education or will struggle to catch up to a level that qualifies them to enrol in HE/TVET courses.
    - International standards, quality assurance mechanisms and recognition of online qualifications remain low. Particularly for MOOCs, which have exploded since the start of the pandemic, there is huge variation in course and trainer accreditation, course completion and qualifications received. Improving the academic quality and reputation of online courses, and speeding up the accreditation of new programmes and curricula (especially for smaller, less recognised institutions) is crucial if online delivery formats will become the new norm.
    - The need for physical interaction. Particularly in TVET and STEM-related subjects, who use a lot of practical training, there is concern that online learning will not be able to replicate face-to-face learning in terms of the ability to develop specific skills, and that online modalities in these skill areas is ineffective and infeasible in the longer-term. Ironically, science and technology programmes are the ones that are most important for Africa's development.
    - Commitment from the international community. Though institutions worldwide have expressed good intentions and ambitions regarding their global commitments to capacity development and knowledge cooperation in response to the crisis, it is yet to be seen if these pledges will be met when tough decisions have to be made.

Three things stand out with regard to capacity development in HE/TVET going forward:

- Capacity development in HE and research remain as vital as ever, if not more important. Revitalising scientific research (by supporting laboratories, young research teams and Centres of Excellence in Africa) was stated as a top priority for recovery of HE systems by the Assistant Director-General of UNESCO for Education in her keynote speech at the 2020 UNESCO conference in Abuja. The AAU COVID-19 plan, in line with the Global Coalition for Education, focuses on partnerships between research institutions and e-Learning organisations, and calls for investments to develop campus networks and support research and teaching infrastructure.
- Innovative initiatives created to cope with the pandemic are likely to stay and bring some positive change. Most of this change is sue to the environmental, time and

cost-saving benefits of distance learning, the increased virtual access to education leading to more inclusion and diversity, and accelerated curriculum development and the faster circulation of new knowledge. It is therefore essential to mitigate the risks of online or hybrid learning, particularly the potential to exclude and increase inequalities in education.

- Global cooperation targeting educational capacity development will not return to how things were before 2020, in either scale or modality. This is less positive, as some irreplaceable things will be lost, some institutions are not ready for the digital transition, and handling certain problems is now harder. Moreover, many donors may focus on a narrower range of specific capacities (such as technological skills or health research), or scale back to focus on primary learning. This makes it essential to focus on the most needed core capacities for institutions and learners, and work toward self-sufficient programmes and institutions that lead their own capacity development.

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Africa Knows! country profiles

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COST Action research network programme

Cooperation for innovation and the exchange of good practice for education, training, and youth systems. EU Commission website, Key Action 2 (KA2) programme

Could COVID-19 improve North-South collaboration?

COVID-19 hits HE capacity building ties with Global South

DAAD Bilateral SDG graduate schools programme

DFID DelPHE partnership programme

DFID's Royal Society Africa Capacity Building Initiative (ACBI)

DFID Strengthening Research Institution in Africa (SRIA) programme

ECDPM portfolio on Africa-Europe relations

Franco-Tunisian University for Africa and the Mediterranean

GFA TVET capacity building and professional development training program in Belize (2017-19)

ILO Virtual Capacity Building Training for the Don Bosco TVET Centre Managers (2020)

Regional TVET Initiative of the World Bank

Regional operations manual of the Africa higher education centres of excellence for development impact (ACE impact) programme

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UNESCO CapED programme

UNESCO TVET projects and operations

Universities ponder the power of North-South partnerships

Women's University Africa

World Bank evolving definitions of capacity building

World Bank skills development./TVET in SSA

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