

Technical Brief: IYF's Systems Change Successes (October 2022)

Introduction

Systemic change is a change in underlying causes of system performance that can bring about a better system (DFID/SDC, 2008). Solving a systemic problem involves multiple stakeholders to ensure behavior, processes and policy changes. In development programmes, the systemic change approach is vital because it focuses on influencing and benefiting a large number of people who were not directly involved in the original intervention (**scale**), continues beyond the programme without further external support (**sustainability**), and its institutions and models can be adapted by system actors to advance the change created (**resilience and localization**).

Systems change is at the heart of IYF's focus and approaches to ensure inclusive youth systems that bear results for young people and form an integral part of its 2025 strategy. IYF's strategy identifies systems as critical enablers for youth to realize their work and life potential. As such, one of IYF's strategic objectives is to ensure systems are youth inclusive and responsive. IYF focuses its programming on facilitating the transformation of the local systems by enabling the reform-minded actors to realign the existing resources, relationships, roles, routines, and rules of local systems to achieve scaled and sustained results which are inclusive and relevant to youth. Consequently, this approach fosters equitable opportunity distribution amongst youth.

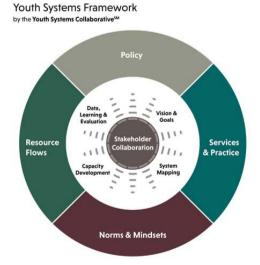
This document highlights the processes and outcomes of selected IYF systems change programmes across the world and their impact on young people in transforming their lives by using six systems change projects implemented by IYF as case studies: Via (Mozambique and Tanzania), High Gear (South Africa), Skills for Life (South Africa), Adelante (Peru), Equip Youth (Palestine) and Networking Scale (Mexico).



Analytical Framework

The Youth Systems Collaborative Learning Framework (YSCLF) was chosen as the analytical framework because it is comprehensive and has focused dimensions that depict how system change occurs to achieve positive outcomes for youth, sustainably, equitably, and at scale. Also, YSCLF was chosen because it has been used widely by IYF and other development actors in various system change programmes.

YSCLF has nine dimensions, five enablers of system change: stakeholder collaboration; vision and goals; systems mapping; data, evaluation, and learning; and capacity development, and four domains in which systems change occurs, namely policies, services and practices, norms and mindsets, and resource flows. In this brief, the selected project processes and system change outcomes for youth have been described in line with the YSCLF to compare and contrast across cases.



1: Via: Pathways to Work Program (Mozambique and Tanzania) (2015-2020)



Processes and Approaches: Via, the five-year programme implemented in Mozambique and Tanzania and funded by Master Card Foundation, used a 'systems change' approach, in supporting the national Technical Vocational Education Training (TVET) and entrepreneurship systems in the two countries, to integrate life skills and career services to be more responsive to the needs of young people to improve economic opportunities and growth for underserved youth. IYF used its flagship curricula: Passport to Success® (PTS) and My Career My Future (MCMF) career guidance, to pioneer the integration of life skills and career guidance into the two country's TVET systems.

Processes and Approaches in Line with YSCLF: Below is a synthesis of the processes and approaches of Via in line with the YSCLF's two dimensions of system change (**enablers** and **domains**).

Enablers of system change

Stakeholder collaboration: Via involved diverse stakeholders, including youth, national Technical Vocational Education (TVET) actors like Instituto de Formação Profissional e de Estudos Laborais Alberto Cassimo (IFPELAC), Instituto Nacional de Emprego (INEP), National Authority for Professional Education (ANEP) and State for Youth and Employment (SEJE) in Mozambique; Vocational Educational and Training Authority (VETA), Morogoro Vocational Teacher's Training Centre (MVTTC) and National Council for Technical Education (NACTE) in Tanzania, employers, private academia like GAPI in Mozambique and Tanzania Entrepreneurship and Competitiveness Center (TECC), and Civil Society Organizations (CSOs), all of which were the levers of system change. Regular engagement of diverse stakeholders with different roles ranging from coordination and participation in the pilot activities such as PTS and MCMF interventions contributed to achieving the desired programme outcome.

Vision and goals: Via had a clear goal aimed at collective behavior of the vocational education and training system actors (inclusive of government employers, civil society and youth) is responsive to the labor market so that young people have improved economic opportunities. This goal was instrumental in informing the project actors to achieve the intended system change.

Systems mapping: Via did not undertake formal mapping to identify relevant programme stakeholders and system boundaries; instead, informal mapping identified critical stakeholders from both the public and private sectors and youth. The identified stakeholders had different roles. For example, Via engaged national TVET actors to pioneer the integration of life skills and career guidance into their respective curricula, while the private academia (GAPI in Mozambique and TECC in Tanzania) provided market-responsive entrepreneurship skills. Also, during Via implementation, informal mapping in Tanzania revealed a new key stakeholder in the youth employment system: the TVET Zonal offices, who served as gatekeepers for curriculum approval and were actively engaged for the TVET reform to succeed. In addition, the programme focused on the TVET system only, thus contributed in achieving its objectives which included, addressing barriers to youth acquiring market response skills which were life skills and career guidance curricula and guidelines, which were primarily theoretical and teacher-centric.

Data, evaluation, and learning: Via had a robust set of data collection activities to meet donor requirements and for adaptive management and learning. Data were gathered at different levels, from youth, institutional and system levels for Monitoring, Evaluation and Learning (MEL). Other MEL approaches included youth-level surveys, mid-term formative evaluation, outcome harvesting, tracer study, youth outcomes study, entrepreneurship study, employer study, and market system analysis.

Data were used to support system change in various ways. For instance, the mid-term formative evaluation revealed that the desired system change process was not occurring at the desired pace. This led to a change in the programme's approach to focus less on the number of beneficiaries reached but on identifying and focusing on levers for systems change. Connectedly, in the programme's final two years (2019 – 2020), programme staff periodically used Springfield Centre's Adopt-Adapt-Expand-Respond (AAER) framework to reflect on where system-level change was happening and where it wasn't to refine and focus intervention efforts. Similarly, data were used to describe systems change. For example, Outcome Harvest was used in year 5 of the project to describe the cumulative systems



change that had occurred from the programme's inception. These, all together, helped the programme to reach its intended objectives.

Capacity development: To provide market response skills and services to youth, Via built the capacity of the TVET institutions and strengthened the capacity of the national TVET system to collaborate with the youth-serving institutions optimally. For instance, it trained and certified 30 Master Trainers and 144 Trainers in the PTS methodology and content. This led to improved pedagogy and adaptation of youth-centred approaches at the IFPELAC and VETA centres. Likewise, over 22,000 youth were trained to enhance their technical, vocational and employability skills using IYF's PTS and career guidance curricula.

Domains of systems change

Policies: Even though Via did not engage in national-wide policy change, Via managed to influence change of curricula and guidelines for life skills and career guidance by using its PTS and MCMF flagships. Previously, life skills and career guidance curricula and guidelines, were theoretical and teacher-centric.

Services and practices: Via focused on supporting local actors to provide life skills, entrepreneurship skills, career guidance and job placement services to youth, to ensure they reach economic opportunities with appropriate technical, vocational and employability skills commensurate to market requirements. Also, the programme focused on changing practices in the TVET centres, it worked with both in Mozambique and Tanzania. For example, Via supported the adoption of new life skills training pedagogy from teacher to student-centred and integrated life skills, career guidance and job placement services into the national VET system to effectively and sustainably deliver those services.

Norms and mindsets: Via contributed to change in the mindset of both the youth and TVET providers in norms related to adopting youth-centred pedagogy. For instance, staff at VETA centres in Tanzania voluntarily use the PTS/KTS pedagogy in diverse training courses, for example, by preparing lessons before classes. This shift in norms and mindset of staff in delivering life skills and career guidance services is attributed to the program's capacity building to staff to provide life skills and apply student-centric approaches (PTS and MCMF). Also, the programme contributed to improved life skills among young persons, specifically in communication, conflict resolution, general conduct, decision making, problem-solving, and collaboration with colleagues.

Resource flows: Financial resources mainly flowed from the Master Card Foundation (MCF) to IYF Head Office in Baltimore and country offices in Mozambique and Tanzania to implement the planned interventions with the selected TVET local partners. Likewise, to support the provision of the new integrated life skills courses within the TVET centres, for example, in Tanzania, in 2021, VETA incorporated additional costs for life skills into short-course fees and integrated life skills costs into their budget.

System Level Changes Achieved: Via resulted in several system-level changes, specifically integrating curricula and services (*life skills and career guidance*) by national TVET systems. For example, IFPELAC integrated Passport To Success (PTS) into short technical and vocational courses in Mozambique. At the same time, ANEP developed and approved a consolidated life skills curriculum, thus allowing integration and expansion of life skills in all Technical and Vocational Training schools across the country. In Tanzania, VETA adapted PTS content and pedagogy into their existing life skills curriculum in long courses to Key to Success (KTS), their new life skills curriculum and manual. Connectedly, three life skills modules (Getting Started, Self-Identification, and Coping with Emotions and Stress) were added to VETA's e-learning platform VSOMO by the VETA's ICT College (VETA Kipawa) and Airtel Tanzania to increase access to students who cannot reach VETA centers in-person due to distance, transport or time limitations.

Similarly, NACTE approved the KTS life skills content to be part of the MVTTC curriculum for training student teachers on life skills and pedagogy. Similarly, VETA adapted IYF's career guidance and job placement manuals (MCMF) and monitoring tools and submitted them to VETA HQ for review and approval for national use. Also, TECC integrated life skills training into TECC's entrepreneurship training program.

Lesson Learnt: Identification and engagement of the right stakeholders/partners are at the heart of meaningful and sustainable system change outcomes. Likewise, adaptive management precisely



understands the systemic change context and adjusts appropriately. For instance, in the first four years, Institute for Employment and Vocational Training (INEFP), the original partner in Mozambique, split into two new institutions, four Director Generals at VETA in the first four years, and the Corona Virus Disease 2019 (COVID-19) pandemic were critical contextual shifts that impacted on the realization of the Via intended system change outcome. In addition, transformative interventions like student-centric learning approaches s (PTS) are critical to improving youth life skills.

Success Stories: Illustrative change stories on how Via contributed to the integration of life skills and career guidance are provided in here:

"The programme has immensely helped us improve our staff's capacity in terms of life skills, career guidance/job placement aspects. For instance, we now have Master Trainers and Coaches. We have 28 trainers on life skills, career guidance/job placement. Some of the trainers graduated to become coaches. We have at least six coaches up until now.—Staff, MVTTC (Tanzania)"

"Since the introduction of PTS, our tracking system shows that confidence has increased in [students] managing their businesses (...) You can notice their confidence from the way they speak, they go out and talk to customers looking for markets. Before, most of them would be scared of so many things, but after the exposure to PTS, when there are events and you expose young people when they are given the microphone, they are able to aptly express themselves. They were shy in the classroom before". TECC Director (Tanzania)"

2: High Gear (South Africa) (2020-2024)

Processes and Approaches: High Gear (HG), the five-year programme launched in February 2020, is implemented in South Africa by IYF in collaboration with the National Association of Automotive Component and Allied Manufacturers (NAACAM) and the Department of Higher Education and Training (DHET), the national partners with the funding from three donors; the United Kingdom (UK) Government's Skills for Prosperity Programme for KwaZulu-Natal Province, and the United States Agency for International Development (USAID) and the Michael & Susan Dell Foundation for Eastern Cape Province implementation. The programme uses a 'systems change' approach to advance South Africa's public Technical and Vocational Education and Training (TVET) college system. Its rationale is to ensure sustained partnership between industry and TVET colleges, to align courses with employer needs, and TVET students have equitable access to high-quality, relevant training and improved employment opportunities.

HG's hypothesis around strengthening industry intermediary involvement in skills programming states that "IF industry intermediaries better support and facilitate collaboration and partnerships between employers and public TVET colleges AND curricula and teaching in TVET colleges is aligned to industry needs, THEN public TVET colleges will become and remain more responsive to the needs of young people and industry, providing employers with an improved skills pipeline, and positioning more young people for workforce success."

The programme draws on industry knowledge and skills imperatives along with IYF curricula enhancement tools to strengthen the market relevance of the select public TVET college courses. HG addresses fragmented TVET college and employer partnerships, underutilized industry groups and insufficient workplace training for TVET staff and students.

Processes and Approaches in Line with YSCLF: Below is a synthesis of the processes and approaches of HG in line with the YSCLF's two dimensions of system change (**enablers** and **domains**).

Enablers of system change

Stakeholder collaboration: HG has several stakeholders, including IYF, the National lead partners: NAACAM and DHET and its affiliated agencies like Quality Council for Trades and Occupations (QCTO) and Sector Education Training Authority (SETA); youth advisors, TVET colleges/actors like provincial industry intermediaries/associations, for example, the Automotive Industry Development Centre — Eastern Cape (AIDC-EC). Besides, the HG's theory of change positions IYF as a catalyst at the initial activity/output levels,



positioning core ecosystem actors (private sector and government) to own the strengthened ecosystem models and activities into the future. In this way, IYF did not place itself as a permanent ecosystem actor in automotive skills development and instead built sustainability and exit strategies from the outset. Therefore, IYF facilitates ecosystem partnerships while the national stakeholders such as NAACAM lead increased industry-wide partnerships with the TVET system, supported by South African funders. Conversely, TVET colleges adopt and champion course upgrades to ensure industry-validated course upgrades and inclusive workplace training for TVET staff and students (youth).

Vision and goals: HG envisions South Africa with a demand-driven TVET system aligned with industry and quality course delivery, generating improved learning and employment outcomes for young women and men. The project has two overarching goals: (i) the sustained partnership between industry and TVET colleges to align courses with employer needs; and (ii) TVET students have equitable access to high-quality, relevant training and improved employment opportunities.

Systems mapping: During the HG inception, IYF, in collaboration with NAACAM, undertook a formal mapping to establish relevant stakeholders to engage, for example, employers, through an "ecosystem-based labour market analysis. Precisely, potential employers were scored based on three metrics: (i) relevance of the industry to TVET college graduates; (ii) demand within the industry for a skills solution; and (iii) feasibility of implementing a sustainable skills solution within that industry, based on dynamics/funding within its stakeholder ecosystem. The analysis helped the programme to focus on partnerships whereby some employers host TVET lecturers while others provide the filming avenue in preparing career guidance materials. The incentive for employers to engage in the programme may be a mix of communications, public relations and financial incentives within South African Public Policy. Also, IYF worked with NAACAM and other provincial industry groups to undertake rapid labour market research and surveys to develop a more nuanced picture of skills priorities in the sector.

Data, evaluation, and learning: HG collects data through research and survey, mainly for adaptive management. For example, competency-based research with automotive assemblers and automotive component manufacturers was undertaken in 2021 to identify the top competency priorities for TVET college graduates and helped the programme design the intervention aligned to the identified skills needed. Likewise, HG quarterly skills surveys, undertaken in 2021, allowed the programme to develop TVET course upgrades. Similarly, the same informed the design of a digital Career Experience Platform (Yakh'iFuture), which, helps the actors, including youth, to access industry-led career guidance services for TVET students. Likewise, HG uses Power Analysis, where the programme specifically maps and reflects on how partner organizations change their engagement and influence within the system.

HG uses the PA variables, like influence, incentive, and concern of the issue, to understand which stakeholders have influence, where they stand on the issues and the levers for change relative to the system change goals. The quarterly HG's PA has helped the programme set and adapt priorities based on the level of buy-in from key stakeholders at the national and provincial levels. Through PA, HG is constantly identifying, monitoring and leveraging systemic incentive structures to influence more stakeholders to join the HG's initiative by generating and showcase relevant evidence to systems change. In addition, competency-based research and research-based practices like project-based learning is integral to the HG and significantly inform how HG interventions are designed and implemented.

Capacity development: HG is focused on supporting the capacity of TVET staff and students to be engaged in practical learning, for instance, through facilitating TVET lecturers' and students' access to workplace training opportunities and building industry intermediary capacity to serve as the management intermediary between TVET colleges and individual employers to sustainably expand workplace training for TVET audiences. Also, the programme supports course material development and capacity-building for college lecturers in areas like project-based learning and work-integrated learning in the form of training and coaching. However, capacity-building support for youth is yet to materialise.

Domains of systems change



Policies: HG has not yet influenced national policy change but has made some strides toward aligning the curricula and teaching to the automotive industry needs, resulting in improved learning and employment outcomes for young people. For example, the programme facilitated TVET colleges to align four courses to the industry requirements and is currently supporting QCTO in redesigning the national TVET college engineering qualifications (Mechanical Engineering, Electrical Engineering, and Electronics).

Services and practices: HG facilitates collaboration and partnerships between employers and public TVET colleges to ensure curricula and teaching is aligned to industry needs, thus resulting in youth's improved learning and employment outcome. HG specifically trains and coaches TVET staff to deliver enhanced courses, co-design gender-inclusive TVET course upgrades, strengthens the capacity of national and provincial industry groups to deliver improved TVET technical assistance, and facilitate improved industry partnerships with other South African funding agencies and collects purpose-driven performance metrics for learning and adaptive management.

Norms and mindsets: HG interventions focus on changing the industry actors' mindset toward providing training and skills that are responsive to the needs of young people and the industry. The same is done through improved ecosystem partnerships, industry-validated course upgrades, and inclusive workplace training for TVET staff and students. HG is influencing TVET lecturers to adopt and champion course upgrades and students to demonstrate improved academic performance and expanded professional networks. As the programme is at its initial stages, changes in norms and mindset are yet to be apparent. Besides, there are some indicators of norms and mindset change. For example, employers have high confidence that students employed through the college perform better than other new entrants.

Resource flows: The programme is financed by three donors; the UK Government's Skills for Prosperity Programme for KwaZulu-Natal Province interventions, while USAID and the Michael & Susan Dell Foundation finance the Eastern Cape Province implementation. To sustainably implement the programme, HG built the capacity of the partners to mobilize financial resources from other South African funding agencies, such as SETA, which provide workplace training/skills development funds. Based on HG's initiatives, by 2021, partners had already secured USD 577,460 public funding for implementing HG/ related programming. Likewise, by 2021, HG partners had submitted skills development funding proposals to public entities worth USD 1,326,854.

System Level Changes Achieved: Though the HG is in its initial years of implementation and systems change, outcomes take relatively longer to materialise, there are some indicators of changes at the system level. For example, DHET, through QCTO, is redesigning the national TVET college engineering qualifications, which is due for launch in 2024. The draft curricula frameworks for new national TVET mechanical, electrical, and electronics qualifications aligns with HG's curricula upgrades. Also, the programme developed Yakh'iFuture, a digital career experience platform owned and operated by NAACAM, and is integrated with the office of the Presidency' SAYouth.mobi platform to support youth transitioning to work. NAACAM has also been approached recently by other manufacturing sector bodies (outside of automotive subsector) asking if they can add materials to this platform, of which NAACAM is seriously considering. In addition, there is a potential for expanding the HG to the National Curriculum Vocational (NCV) qualification based on the demand from the TVET colleges. Besides, as the programme is relatively at its inception phase, it is too soon to ascertain some outcomes related to system change, for example, the extent to which HG has supported the industry group partners to access increased skills development funding.

Lesson Learnt: Effective partner engagement is critical to fostering programme interventions. For example, an effective relationship between NAACAM and individual employers has resulted in some of them voluntarily taking essential roles in achieving the HG outcomes. For instance, some employers host TVET lecturers while others provide the filming avenue in preparing career guidance materials. Also, through more robust relationships between IYF, NAACAM and industry groups, studies such as rapid labour market research and competency-based research were conducted swiftly and with the involvement of 36 firms leveraged on the created stronger partnership. In addition, industry associations have a pivotal role in skills



development, including fostering strengthened partnerships between individual employers and public education institutions. Industry groups are uniquely positioned to do this in a way that no other groups can. On the other hand, system change is complex and takes relatively longer to be realized. Therefore, the programme management team needs to continuously monitor the intended outcomes while allowing time for the intended change to occur.

Success Stories: Illustrative change story for the HG programme:

Stronger partnerships between industry intermediaries, TVET colleges, and employers are critical to system change, if the actors see the benefits of being part of the initiative. For example, in the year 1 programme evaluation, industry association respondents showed that they have begun to integrate the HG concepts from the programme into their own developmental processes: "we didn't understand the landscape and funding mechanisms" we are now using the learning acquired through HG to "explore skills development interventions and apply for additional funding to support HG as well as our own initiatives."

"NAACAM, which never had any role in skills development before High Gear--is now taking a lead role in several ways on skills development in the country, including working with Presidential Youth Employment Intervention to create a skills development roadmap for the automotive manufacturing sector. NAACAM has also established other skills initiatives separate from High Gear, including scholarship programs for university students. To me, this is one of the essential system-level changes achieved and aligned directly with High Gear's hypothesis." (Former HG Programme Director).

3: Skills for Life (S4L) (South Africa) (2017-2024)

Processes and Approaches: S4L is the eight-year programme (2017 – 2024) implemented by IYF in four provinces of South Africa: Gauteng, KwaZulu Natal, Western Cape and Limpopo Provinces, with funding from the Embassy of Ireland in South Africa (2017 – 2022), PepsiCo Foundation (2018-2021) and Debeers Group (2020 – 2024) to enable the public Technical Vocational Education and Training (TVET) system to better equip young women and men with the life skills and technical skills needed for academic, workforce and employability success. The Embassy of Ireland funding focused on pioneering integration of Passport to Success (PTS) into the South African TVET system via the National Curriculum (Vocational) [NC(V)] Life Skills (LS) Subject and specifically funded the piloting and initial national rollout of PTS/LS. PepsiCo built on upscaling the Embassy of Ireland work but focused on strengthening the use of digital resources in delivering LS courses. Likewise, Debeers Group funding builds on the work done by its predecessors but focuses on the Limpopo province and took on board more interventions related to improved employability through youth internships and practical training placements, the expansion of PTS into the NATED learning pathway and the provision of Effective Teaching methodologies within technical learning programmes.

Process and Approaches in Line with YSCLF: Below is a synthesis of the processes and approaches of S4L in line with the YSCLF's two dimensions of systems change (**enablers** and **domains**).

Enablers of system change

Stakeholder collaboration: S4L has several stakeholders, including IYF, the Department of Higher Education and Training (DHET), TVET colleges, municipal governments, employers, lecturers and students (young women and men).

Vision and goals: S4L envisions the public TVET college system equips learners with the life and technical skills needed for improved academic, workforce and employability success. The programme's goals are to (i) improve life skills education for young women (and young men); (ii) improve technical training for young women (and young men), (iii) improve employment and entrepreneurship prospects for young women (and young men) and (iv) promote long-term sustainability and national scale.

Systems mapping: The landscape analysis was undertaken during the programme's inception to establish crucial S4L stakeholders. For example, the programme identified the TVET Colleges with a focus on their dynamics, strengths, and weaknesses and subsequently classified them based on their ability to execute the programme's interventions towards PTS/LS integration. Also, lecturers were identified as champions,



specifically as PTS/LS Master Trainers (MTs) who are able to facilitate PTS/LS Training of Trainers (ToT's) workshops using the enhanced PTS/LS course and its improved pedagogy. Another aspect considered in the landscape analysis was co-funding, in which DHET was identified to fund some operational programme activities such as transport and lecturer resources and training aids to ensure sustainability after the programme is completed. Likewise, in 2015, IYF undertook a youth labour market assessment in South Africa's manufacturing sector, whereby TVET stakeholders and employers showed that TVET students lack the life skills necessary for academic and workforce success.

Data, evaluation, and learning: S4L collects data in various ways like, student data from the TVET colleges, annual stress tests, mid-term evaluation, summative evaluation and employer satisfaction surveys. The collected information is used for adaptive management specifically on how the intervention are done based on outcomes from the TVET college data as well as used in the documentation of programme outcomes related to lecturers, learners, workforce outcomes and employer satisfaction. Likewise, ongoing Monitoring and Evaluation (M&E) focuses on reduced Life Orientation (LO), now called Life Skills (LS) course absenteeism and increased course progression rates.

Capacity development: S4L is focused on supporting the integration and scaling of the Passport to Success (PTS) curriculum into the TVET system, specifically through strengthening the delivery of the government's existing life skills course (by then called LO) by orienting teachers to integrate the student-centred pedagogy of PTS, as well as select PTS content, into the delivery of their existing curriculum. By June 2022, S4L built the capacity of 280 teachers on life skills. Also, the programme supports strengthening IYF's Effective Teaching resources through integration of gender-aware content, and digitization of select elements of the lecturer-support resources under Effective Teaching and PTS/LS, for deployment through the national government's online National Open Learning System (NOLS) [formerly Lecturer Support System (LSS)] web portal. In addition, S4L supported PTS/LS delivery to youth in the TVET college covered by the programme through the NC(V) Life Skills subject, and, by June 2022, 27,000 students were reached. Likewise, by August 2022, over 400 young persons have been supported accessing on-the-job training through paid internships. Similarly, S4L is building the capacity of generic technical training course lecturers/none—life skills lecturers to use student-centred and action learning and engaging teaching skills and approaches to improve student learning outcomes beyond the LS course.

Domains of systems change

Policies: S4L has not influenced national policy change but influenced the South African DHET to approve the integration of Passport to Success (PTS) into the LS curriculum, and by 2020 PTS was already piloted in 7 TVET colleges in South Africa. In September 2021, DHET approved the national rollout of the PTS/LS integration. This precedence will allow all the 50 TVET colleges and their respective campuses across South Africa to provide enhanced LS courses to youth beyond the S4L programme life cycle.

Services and practices: In order to integrate PTS into LS, the South African TVET system, the programme has been facilitating the lectures through training (ToT and vToT) and coaching, for example, how to use PTS/LS Lesson Plans for the TVET colleges to have the capacity to deliver PTS/LS. Likewise, S4L has supported PTS delivery to youth in the TVET college covered by the programme through student support services to equip students with life skills necessary for academic and workforce success.

Norms and mindsets: S4L influenced TVET lecturers to deliver LS integrated with PTS's crucial elements. The improved LS course is more action-oriented and puts students in the driver's seat as opposed to traditional teaching approaches involving traditional lecturing. The unprecedented challenge of COVID 19, which occurred during the implementation of S4L, made digital learning essential, the capability of which was built by the S4L across the TVET college landscape, for instance, through the use of virtual Training of Trainers (vTOT) by using the PTS/LS learning content deployed via the DHET NOLS (previously LSS). The programme contributed to building the capacity of lecturers teaching both LS and technical courses to use engaging teaching approaches as opposed to the previous when traditional lecturing approaches were used.



Resource flows: Three donors finance the programme; the Embassy of Ireland in South Africa, PepsiCo Foundation and Debeers Group. Also, as part of operational sustainability, DHET has set aside the budget for funding the lecturers' resources (stationary and other materials) for delivering the LS course across the 50 TVET colleges in South Africa. Likewise, financing paid internships are out of the scope of the Debeers funding; as such, the programme established the Employment Council in Limpopo Province with members from municipalities, TVET colleges and employers from the private sector to support and sustain this initiative, including through the use of leveraged funding from the National Skills Fund (NSF) and Sector Education and Training Authorities (SETA's). S4L is now building the capacity of the established Employment Council, including developing the handbook for guidance on how it should handle student placements sustainably, containing information on how to apply for funds to cover the student's practical placement costs from different government agencies.

System Level Changes Achieved: In June 2019, the South African DHET approved the integration of Passport to Success (PTS) into the LS curriculum. Out of the 88 modules in PTS, 64 PTS modules are embedded in the LS curriculum (NCV Level 2 LS: 25 PTS lessons; NCV Level 3 LS: 23 PTS lessons and NCV Level 4 LS: 16 PTS lessons). Also, LS is a mandatory course for 20% of TVET college enrollment (i.e. those students enrolled in the three-year NC(V) qualification). Similarly, in September 2021, DHET approved the national rollout of the PTS/LS integration, thus providing an opportunity for the provision of PTS/LS courses in all 50 TVET colleges across South Africa. In addition, PTS is being integrated into other vital courses, such as the National Accredited Technical Education Diploma (NATED), with DHET requesting the next phase of integration into the Vocational learning pathway where these life skills are lacking.

Likewise, S4L established a system of supporting young persons to gain job experience through job placements and paid internships in the Limpopo province, thus leading to an improved relationship between TVET, youth and employers and improved youth employability. Similarly, the development of digital resources such as vToT by using the PTS/LS learning content and deployed via the DHET NOLS will be used to sustain the provision of PTS/LS in all the 50 TVET colleges in South Africa. Correspondingly, the improved capacity of non-LS lecturers by using engaging pedagogy in various TVET colleges will contribute to youth's enhanced learning outcomes and access to work.

Lesson Learnt: Integration of the PTS into the TVET system with the approval from the relevant authorities, such as DHET, is critical to improving the life skills of youth, which is crucial to their academic, workforce and employability success. Evidence shows that imparting students with the PTS/LS integrated course has resulted in overall improvement of life skills by the students participating in the programme, especially in teamwork, discipline, ability to find information, communication, time management and problem-solving. On the other hand, effective engagement with crucial TVET system actors such as DHET and lecturers is critical to system change. For example, even though life skills were already provided to students through LS Course, the programme's rapport built with the government prompted DHET to adapt the IYF's PTS content into the LS course. This development ultimately contributed to improved youth access to life skills essential for academic and workforce accomplishment.

Also, using digital resources is a critical and effective way of delivering knowledge at a scale. For example, due to enhanced digital resources, the programme in 2020/21 programme reached over 5,000 youth across South Africa through PTS Traveler. Likewise, as part of the LS national rollout plan by August 2022, S4L trained about 150 lecturers on LS through vToTs. Reaching these numbers could have been time-consuming and would have required more financial resources for convening physical workshops/training.

Success Stories: Illustrative change story for the S4L programme:

Integration of PTs into the South African TVET system has resulted in significant gains in the acquisition of life skills by the participating student. See a quote below.

"For the College of Cape Town (a public TVET college), which was amongst the college used to pilot PTS, the largest gains made by the students who participated in the PTS programme came in form of teamwork, discipline, ability to find information, communication, time management and problem-solving. Also, three



months after the training, 60% of the students were employed, and an additional 20% were continuing with their studies (Phase II Proposal to De Beers Group: Expanding Youth Economic Opportunity in the Limpopo Province, 2020)."

"The programme has contributed to changes in the norms and how lecturers deliver the LS and other technical courses mostly by using engaging teaching approaches. These approaches make youth interested in the studies and simplify understanding of the subject matter. Likewise, through LS, lecturers testify that their understanding of diversity and inclusion of the marginalized parsons has improved as such, nowadays they can easily handle students' issues related to sexual harassment, bullying, and sexual orientation comfortably, unlike in the previous where some of the lecturers had stigma on the same due to limited understanding, Khalil Patel, Programme Manager."

4: Adelante (Peru) (2018-2021)

Process and Approaches: The Adelante Program, "Forming Youth with Opportunities", was implemented between 2018 and 2021 in the Mariscal Nieto and Ilo provinces of Moquegua in southern Peru by IYF in partnership with the Service Center for Labor Training and Development (CAPLAB, in Spanish) and the Moquegua Regional Education Management (GREMO, in Spanish, now DREMO), and funded by Anglo American Group Foundation and Caterpillar Foundation. Adelante used a system change approach and designed interventions that focused on changing roles, routines, and formal and informal rules to change system behavior.

Process and Approaches in Line with YSCLF: A synthesis of the processes and approaches of Adelante in line with the YSCLF's two dimensions of systems change (enablers and domains) is provided below.

Enablers of system change

Stakeholder collaboration: Adelante had various stakeholders, including the Service Center for Labor Training and Development (CAPLAB, in Spanish), the Moquegua Regional Education Management (DREMO, in Spanish and UGELs), employers, students, teachers, and parents. Also, the programme worked with educational institutions (secondary schools and Institutos Tecnicos/Technical Institutions of Higher Education (TIHE) at the grassroots level to incorporate and adapt the training in socio-emotional skills (Passport to Success - PTS), vocational guidance (Descubre tu Vocación - DTV), and project-based training methodology (PBL) (Desafío Tec) to their academic structures. Crucial system stakeholders engagement was done through a formalized Multisectoral Committee and the Management Committee, which was guided by a joint roadmap for sustainability.

Vision and goals: Adelante programme sought to improve the coordination and exchange of information between highly dynamic sectors and public education systems in Moquegua, thus ensuring that young people in the region can access high-quality secondary education and relevant vocational education and training that responds to their needs and interests.

Systems mapping: Formal ecosystem mapping focused on the extent of the problem and critical stakeholders relevant for improving the education system and youth employability. The programme focused on working with and within the region's educational system to promote youth exposure to and opting for technical career options, with young people in the final grades at regular basic education institutions (BEI) and TIHE. Critical identified education system change barriers for the new teaching pedagogy were attrition at all levels of leadership within the local system and lack of resources to implement those programmes. Also critical was understanding the balance between DREMO authority and teachers' union rules and authority and understanding motivators for contract (e.g., obtaining continuing education units) vs tenured teachers (e.g., improved student behavior in the classroom).

Data, evaluation, and learning: Adelante collected data through surveys and studies to inform programming and adaptive management. For example, in 2017, a diagnostic and situational analysis of the job market conducted in southern Peru identified socio-emotional as the most demanded skill in the job market. Likewise, the programme conducted process evaluations and mid-term reviews to understand



perspectives, knowledge, feelings, and how key stakeholders were experiencing the project in order to fine-tune stakeholder engagement strategies as well as informing overall programme implementation approaches.

Capacity development: Adelante provided technical assistance to education system administrators to facilitate socio-emotional skills curriculum integration. Also, Adelante built the capacity of teachers and directors from education institutions and local authority officials to continue training teachers, thus qualifying them as multipliers who continued to train new teachers. A total of 195 secondary school teachers and directors at 23 secondary schools were trained on socio-emotional skills (Passport to Success (PTS)) and Project-Based Learning (PBL) (Desafío Tec) methodologies. Likewise, 184 college teachers at five colleges/institutions were trained on the same. PBL classroom collaborative learning environments were installed in four technical institutes to facilitate the implementation of the new adapted PTS learning approach. The programme trained 5,371 young people in secondary schools and 1,371 student teachers by using the adapted methodologies.

Domains of systems change

Policies: Though the programme did not influence national-level policy, it did influence regional policy. In July 2021, DREMO issued a Resolution that "Declares of regional interest in the incorporation of soft skills to the levels of Regular Basic Education and Higher Education in Public Institutions in the Moquegua Region" and recommends "the evaluation and incorporation of soft skills (PTS and DTV) and active learning methodologies (PBL) in their curricula for developing socio-emotional and citizen competences." By the end of 2021, 28 educational institutions (23 secondary schools, four TIHE, and the teachers college) successfully incorporated Adelante's methodologies into their Institutional Educational Plans (PEI) and their Teaching Units (in the case of institutes), that is, PTS, DTV and PBL have been adapted and integrated by the education authorities in their academic structures. As a result, these interventions continue beyond the Adelante project life cycle. Also, in February 2022, DREMO issued a resolution that formalizes the Adelante Programme Management Committee, led by instructional specialists from the UGELs at Ilo and Mariscal Nieto as well as the DREMO, as the entity responsible for providing continuity to the soft skills strengthening process in the Moquegua region.

Services and practices: Adelante influenced the training institutions to provide socio-emotional competencies to youth by using soft skills (PTS and DTV) and active learning methodologies (PBL) by fostering the integration of soft skills into curricula. The programme facilitated the innovative provision of socio-emotional skills through the IYF's PTS Traveler virtual course and built the capacity of teachers, directors and local government authorities to provide socio-emotional skills when in-person sessions were not possible. Likewise, the programme supported the provision of soft skills to the youth by using PTS, DTV and PBL methodologies.

Norms and mindsets: Adelante changed teaching strategies into more collaborative ones even during the COVID-19 pandemic, whereby PTS Traveler was used to deliver virtual learning sessions to youth through Peru's Ministry of Education Aprendo en Casa" (I Learn at Home) programme. Also, through DTV, teachers learnt to become more of teaching facilitators, while students take the leading role in the learning process and have strong problem-solving skills. Also, through PBL, teachers have evolved from knowledge transmitters to learning facilitators. PBL supported the development of youth agency and civic engagement, with teachers supporting young people as they developed solutions to community problems. Additionally, PBL created direct ties to local businesses through mentorship on project development. This was a connection that did not exist to this degree previously. The practice change started as a proof-of-concept with a small number of trainers and classrooms, which led to demand from other teachers as they observed desirable changes in others' classroom behavior, which grew to demand from principals.

Resource flows: Adelante was financed by two donors: Anglo American Foundation and Caterpillar Foundation. By 2021, 28 educational institutions incorporated Adelante's transferred methodologies into their PEI and their Teaching Units (for institutes), including the budget for the continued provision of the



adapted and integrated services. This development reasonably ensures the continued provision of the adapted services beyond the programme's support.

System Level Changes Achieved: Adelante delivered results in changed rules, routines, and roles.

Changed Rules: In July 2021, DREMO issued a resolution which declares that the incorporation of soft skills into curricula is of regional interest and institutionalizes the measure as part of the policies and priorities of the region's educational authority. Also, DREMO Resolution (February 2022), through which the Adelante Program Management Committee Program act, was created to continue promoting and strengthening soft skills.

Changed Routines: For instance, the use of virtual platforms, modified curricula with transferred methodologies (PTS, DTV and PBL), and education institutions' routine conversations with employers using the PBL methodology.

Changed Roles: For example, teachers evolved from knowledge transmitters to learning facilitators, schools are now implementing PTS and DTV and creation of a Management Committee that promotes articulation and democratizes relations between key education system stakeholders.

Lesson Learnt: Creating a Management Committee that promotes articulation of and democratizes relations between key education systems is critical to attaining the desired system change. Effective engagement of stakeholders, for instance, education providers, local authorities, and employers, is vital in achieving system change responsive to market needs. Identifying systemic barriers, like high attrition within decision making positions, is critical to designing and implementing the right interventions to achieve the desired change. Likewise, effective capacity building for key stakeholders such as teachers, directors, local government officials, and administrators is critical to achieving sustainable systems change.

Success Stories: Illustrative change story for the Adelante programme are provided below:

"Students participate more now because they relate more and present to the teachers, unlike previously when they used to listen to the teachers, and their participation was minimal. Currently, they are well prepared for life skills; as such, they will do well when they enter the job market. In the past, even degree holders were sometimes unable to apply for a job. Now they are competent, for example, they can introduce themselves." (Carmen Rodriguez. Director, Instituto Los Andes de Carumas).

"Parameters and channels were defined between the DREMO and the institutions to access the different methodologies and people were trained at the UGELs, including teaching specialists and other officials in technological areas." (Rosmary Vega. Anglo American Quellaveco)

"The key to lasting systemic change is engaging with local leaders, formal and informal, listening to their interests and expertise, and working within existing structures to make improvements. For Adelante, the key was to work directly with professional teachers and instructional specialists who saw the benefits of the program and could promote buy-in at all levels. Adelante was locally led, and its interventions continue because of this local leadership," Lynda Aaron, Senior Technical Advisor, IYF.

5: Equip Youth (Palestine) (2015-2020)

Process and Approaches: Equip Youth Project (EYP) is a five years project implemented in two phases: phase I (2015 – 2017); phase II (2018 – 2020) in Westbank and Gaza in Palestine. EYP was implemented by IYF in partnership with the Palestinian Charity for Youth Engagement and Empowerment (CYEE) and funded by the Caterpillar Foundation to improve Vocational Training Centres (VTC) graduate students in Palestine by equipping them with the right skills demanded by the labour market. The EYP focused on addressing the shortfall in critical employability and career training services by building a bridge between the gap in the training provided by the VTCs and the labour market requirements.

Process and Approaches in Line with YSCLF: Below is a synthesis of the processes and approaches of Adelante is in line with the YSCLF's two dimensions of system change (**enablers** and **domains**).



Enablers of system change

Stakeholder collaboration: EYP stakeholders included IYF and CYEE (implementing partners), government institutions, specifically the Ministry of Labor (MoL) in the Westbank and the General Directorate of Technical and Vocational Education Training (TVET) in Gaza. The relationship between IYF and CYEE as the implementing partner was through the grant agreement. The relationship between the implementing partners and the two government agencies was through a Memorandum of Understanding (MoU). Also, the project engaged teachers and students from 20 VTCs {20 (80%) public and 4 (20%) private}, the Palestine Chamber of Commerce and the employers (private sector) through paid internships.

Vision and goals: EYP aimed to improve youth employability by equipping them with the right skills demanded by the labour market. The project worked with the TVET actors, specifically MoL and VTCs, to integrate life skills {Passport to Success (PTS)} and career guidance {My Career My Future MCMF) as part of the VTC curricula.

Systems mapping: No formal system was done, but, the Palestine's TVET system is two-pronged, with (i) VTC providing a year training programme (Professional Certificate), and the MoL manages the centres, and (ii) TVET schools providing two-year courses programmes (Professional Diploma) and these schools are managed/affiliated to the Ministry of Education. Likewise, the admiration of VTCs for Gaza and Westbank is different. Understanding the system helped EYP to focus its interventions on the VTCs only (institutions providing one-year courses only).

Data, evaluation, and learning: Data collection was done in various ways, including baseline and pre- and post-training programme surveys. The outcomes of the analysis of the information collected were mainly used for adaptive management and showcasing the results to the TVET actors on how the project was critical to teachers, students, and the overall system change.

Capacity development: Supported integration of PTS through training teachers and piloting PTS in VTCs. Specifically, EYP trained about 200 teachers on life skills and career guidance, and about 3,000 students were trained on life skills and career guidance. As part of improved practical skills, the project also facilitated 100 paid internships, out of which 35% were subsequently employed in a full-time jobs. Also, EYP provided 20 competition-based grants to youth worth \$1,000 each to the VTC graduate, who ventured into various income-generating activities. The project also facilitated all who secured the start-up grants through training and coaching, specifically on financial planning, equipment purchase and maintenance and overall business management.

Domains of systems change

Policies: EYP did not influence national-level policy, but by 2020, all VTC administration had adopted and integrated PTS and MCMF as a comprehensive course for life skills and career guidance into their programme plans. The new adapted course is called "Professional Culture."

Services and practices: EYP influenced the VTCs to provide socio-emotional competencies to youth by using PTS and MCMF content and approaches. Also, the project fostered the adoption and integration of PTS and MCMF in the VTC's programmes by explicitly building the capacity of the institution, for example, through facilitating training and linkage with other TVET actors such as employers and government agencies in strengthening the system of equipping youth with skills demanded by the labour market.

Norms and mindsets: EYP contributed to the change in teaching approaches from the lecturing approach by the teachers to the action-oriented approach with students taking an active role. This change contributed to improved teacher-student relationships because of the changes in the provision Profession Culture Course, the methodology of which has been adopted by teachers even in the provision of other courses.

Resource flows: Caterpillar (donor) disbursed the funds to IYF, which were paid to CYEE, the local direct implementing partners, to finance different project interventions like training of VTC teachers and students, internship and youth grant costs.



System Level Changes Achieved: EYP contributed to all VTCs adopting and integrating PTS and MCMF as a comprehensive course for life skills and career guidance into their program plans. Specifically, the course is called "Professional Culture". This course will be provided to all students of the VTCs because it is considered a prerequisite for graduation.

Lesson Learnt: Engaging key stakeholders, such as the government right from the inception of the programme, is crucial to achieving system change even in a complex environment.

Success Stories: Illustrative change stories for the Adelante programme are provided below:

"Teachers and VTC staff members now have the knowledge, skills and attitude; they can better provide their students with the soft and practical skills needed to help them to successfully transition and be able to compete in the labour market." (Programme Director, IYF Palestine)

"Students have significantly improved their soft skills such as communication and problem skills and are more likely to be employed than their peers both in Gaza and Westbank." (Programme Director, IYF Palestine)

"Some positive indicators reflect a social change in people's perception of vocational training, especially women's participation in nontraditional programmes through VTCs. I believe that the willingness of the young women with the support of their families will continue joining nontraditional programmes and professions." Nidal Ayesh, Director – Vocational Training Directorate/MOL Palestine)

6: Networking Scale (Mexico) (2019-2022)

Process and Approaches: The Skills Development Programme for Employability (Networking Mexico) has been implemented since 2019 and will come to an end in December 2022. The programme covers 8 states and 30 campuses in Mexico by IYF with funding support from Bécalos, Nacional Monte de Piedad and inkind support from CISCO. Networking programme used a system change approach with a focus on curricular change and strengthening of institutional capacities (provision of specialized equipment and teacher training) for three technical careers: (i) Computer Science, (ii) Computer Equipment Support and Maintenance and (iii) Telecommunications through the incorporation of the Cisco Certified Network Associate (CCNA) technical content. The programme's Theory of Change (ToC) states that "If the relevance of the curriculum increases, the way the curriculum is taught improves, teachers are trained, laboratories are well-equipped, and the link with the private sector is strengthened then young graduates of technical high school will have skills and competencies that industry demands, which will allow them to access decent jobs, contributing to social mobility."

Process and Approaches in Line with YSCLF: The below synthesis of the processes and approaches of Networking Mexico is in line with the YSCLF's two dimensions of change, namely **enablers** and **domains** of system change.

Enablers of system change

Stakeholder collaboration: Networking Mexico has several stakeholders, including the National College of Technical Professional Education (CONALEP), National Chamber of the Electronics Industry of Telecommunications and Information Technology (CANIETI), CISCO Networking Academy (CISCO Netacad), the Mexican Association of the Information Technology Industry (AMITI), MXTI, and American Chamber (AMCHAM), employers, students (young people), and parents.

Vision and goals: Networking Mexico aims to identify, develop and strengthen the skills most demanded by the Information and Communications Technology (ICT) sector to raise employability and improve the professional prospects of young people, specifically to get decent formal jobs with benefits related to the area of studies and with a fair salary. The focus is to provide the CCNA Routing and Switching course, which is normally taught only at the higher education level, in the CONALEP subsystem (TVET schools), specifically in 30 selected campuses in 8 states. In the Cisco CCNA Routing and Switching course, students learnt about the architectures, models, protocols and elements that connect users to the networks. Therefore, students



gain a basic understanding of how networks work and can build simple Local Area Networks (LANs), perform basic configurations of routers and switches, and implement IP addressing schemes.

Systems mapping: Formal mapping was done through IYF's proven methodology prioritizing stakeholders according to interests and capacity to change systems, incorporating the long relationship of IYF in Mexico with the Education System specifically with Technical and Vocational Education and Training schools through the integration to their curricula relevant technical content aligned to the labor market needs, and involving IT clusters that demand specific needs in relation with the TVET system with the rationale. Specifically, the project targeted young people in technical high school education, particularly in the CONALEP subsystem, enrolled in Information Technologies. The focus is on curricular change and strengthening of institutional capacities (equipment and teacher training) for three technical careers: (i) Computer Science, (ii) Computer Equipment Support and Maintenance, and (ii) Telecommunications. Networking Mexico focused on eight states, 25% of 32 states of Mexico. Likewise, the programme focused on 30 CONALEP campuses, equivalent to 17% of the 172 campuses with IT oriented careers in Mexico.

Data, evaluation, and learning: Data were collected at the process and impact level mainly to understand the extent of what was addressed by the programme and to inform the programme results. Data collection activities included labour market assessment and IT-related vacancy assessments, surveys, and data from the TVET Internal data system like students' contacts and socio-demographic information and academic records. The collected data were used to showcase to the system actors the outcomes of the programme. Likewise, the data collection results were used to engage other stakeholders to invest in this initiative for upscaling the same to other states in Mexico, as the programme covered eight states, equivalent to 25% of the total states in Mexico. For example, Bécalos was the only donor during the programme's inception, but a few years later, based on the outcomes backed up with data, Nacional Monte de Piedad came on board as another donor to further support the programme interventions.

Capacity development: Networking Mexico trained teachers on how to train CCNA Routing and Switching skills and competencies to the young persons on the CONALEP campuses. Also, over 10,500 (over 100% of the target of 9,500) youth were trained in CCNA Routing and Switching Course. In addition, the programme donated IT equipment to each of the 30 campuses covered by the programme as such contributed to enhancing/establishment of CCNA academies to facilitate the provision of CCNA Routing and Switching by using the technology used in the industry, thus producing graduates with relevant skills and capacity required by the market. The capacity building for teachers and investment in the school equipment will allow continued provision of the same skills and competencies beyond the programme life cycle.

Domains of systems change

Policies: Networking Mexico did not influence policy change, but the programme intervention has contributed to the 30 CONALEP campuses in 8 states integrating of CCNA Routing and Switching curricula in their respective programme. Likewise, these curricula are embedded at the national level. This entails that every state with the possibility to implement the curriculum will be capable of doing so because the information and content are already in place, specifically in the CONALEP subsystem.

Services and practices: The programme influenced CONALEP institutions to provide industry-demanded IT technical skills and competencies to improve their employability and job retention. Networking Mexico specifically facilitated teachers' and youths' capacity building to teachers and students on CCNA Routing and Switching competencies skills and competencies. Also, Networking Mexico linked the CONALEP campuses and youth with employers. In addition, the programme facilitated the procurement and installation of the IT equipment used in the industry to aid the students learning process. Similarly, CISCO Netacad provided a management system that enabled learning amongst teachers and students because it simplified information sharing and flow.

Norms and mindsets: Networking Mexico contributed to the improved students' market demanded IT technical skills. As such, they are likely to get more formal jobs/ better jobs than their peers who did not receive the same training within their respective states of residence. Changes in how training is delivered contributed to improved participation and graduation of women in the three IT careers integrated with



CCNA technical content. Generally, the overall graduation rate changed from 48% during baseline in 2016 to 51% in 2022.

Resource flows: Bécalos finances the Networking Mexico programme by supporting some of the teacher training, purchase of IT laboratory equipment, and piloting of training students on CCNA Routing and Switching competencies. Also, Bécalos contributes with its dissemination and communication skills, although they are not identified as an official process within the operation of the programme. Also, CISCO Netacad provided the in-kind contribution learning management system and the CCNA Routing & Switching curricula and supported most of the teacher training.

System Level Changes Achieved: Networking Mexico led to 30 CONALEP campuses in 8 states integrating of CCNA Routing and Switching curricula and support equipment in their respective programmes. Therefore, the provision of CCNA Routing and Switching courses to young people in the eight states will continue beyond programme life cycle. Also, teachers have changed how they approach and engage students by using equipment as those used in the market.

Lesson Learnt: Effective engagement of the crucial stakeholders like the campuses, youth and private actors is key to achieving system change because each partner has a complementing role in achieving the intended results. Likewise, investment in equipment, for example, in the campus IT laboratories, is critical to creating a continuous learning environment beyond the programme life cycle. The learning management system provided by CISCO was crucial for remote learning and helping teachers track what was done by the students.

Success Stories: Illustrative change story for the Networking Mexico programme are provided below:

"The programme has helped youth to acquire CCNA Routing and Switching competencies which give them a competitive edge in penetrating the market to formal jobs compared to their peers without the same knowledge. For example, the impact assessment results show that students through the CCNA Routing and Switching competencies are 17% more likely to acquire formal jobs, 14% more likely to continue to college, and have an average income 45% higher than others. Consequently, graduates have the opportunity to access formal well-paid jobs with employment benefits. " (Katia Moreno, Programme Lead)

"With a one-time investment, we have managed to reach and impact over ten thousand youth from 30 campuses in eight states in Mexico. Then, as all 30 campuses integrated CCNA Routing and Switching curricula in their IT programmes, it is likely that there will be a lasting impact as new generations of students will also benefit by acquiring on-demand skills and competencies required by the labour market," Lucia Hernandez (LAC MERL Manager)

Overall Key Lesson Learnt

- The programmes included in this synthesis indicated the engagement of diverse stakeholders from government institutions, TVET colleges, teachers/tutors and students. Some programmes used distinct approaches to ensure effective stakeholders engagement. For instance, Adelante (Peru) used a formalized Multisectoral Committee and the Management Committee with a joint roadmap to ensure sustainability. Also, HG (South Africa) used the power analysis to establish the influence, incentive, and concern of the issues for various stakeholders and effectively adapt its stakeholders engagement strategy and programme implementation approaches.
- ii. Effective engagement of crucial programme stakeholders such as government ministries, agencies and departments from the programme inception is critical to achieving the systems change as the partners participate in different roles, such as piloting the innovations that contribute to realizing the intended system changes.
- iii. Some programmes, such as Adelante and Networking Mexico, indicated the parents as amongst the programme stakeholders; their participation in influencing or contributing to system change cannot be vividly established. Likewise, though the youth were recognized as crucial stakeholders



- across the six sampled programmes, there were no clear mechanisms created to get their inputs or to engage them in the systems change.
- iv. Clear goals and effective communication with the key stakeholders contributed to achieving the intended goals. All the six programmes had clear goals and undertook different interventions aimed at system change to improve youth's learning outcomes and employability.
- v. System mapping to address the problem, identifying key stakeholders, and establishing system boundaries was done in all six programmes, but for some such as Via Equip Youth, this mapping was an informal, iterative process rather than a formal process supported by a clear method and structured tools as it was done for HG, S4L, Adelante and Networking Mexico.
- vi. Data were collected using different approaches for different purposes, but evidence of systematic use of data to influence system change was clear in limited cases, such as the power analysis used in High Gear and the process evaluation in Via.
- vii. Capacity-building interventions in four of the six sampled programmes (Via, S4L, Adelante and Equip) mainly focused on influencing the TVET systems in their respective countries of implementation to sustainably deliver LS and CG to the young people as a way to improve youth's learning outcomes and employability. In comparison, two programmes (HG and Networking Mexico) focused on practical technical learning aspects using the current industry's technology and resources to achieve the same outcome.
- viii. Five of the six programmes (Via, HG, S4L, Adelante and Equip Youth) led to the integration of PTS and MCMF into their respective TVET systems. Besides, one programme (Networking Mexico) contributed to integrating CNA Routing and Switching curricula in the selected CONALEP campuses.
 - ix. Three of the six programmes (Via, S4L and Adelante) influenced changes in budgeting within their respective TVET/education system to sustain the system change.
 - x. Four of the six programmes which had at least three years from their inception show (Via, Adelante, Equip Youth, and Networking Mexico) indicated to have contributed to the change in teaching pedagogy, for example, by using student-centric approaches as opposed to the traditional lecturing approaches.
- xi. System change takes relatively longer to happen as they involve multiple processes and stakeholders. Therefore, it was difficult to establish system change in some sampled programmes which are at their initial stages of implementation/ongoing like the HG and S4L both from South Africa.
- xii. The use of digital resources such as PTS Traveler is a critical and effective way of delivering knowledge at a scale. Programme such as Adelante (Peru) and HG& S4L (South Africa), utilized digital platforms in executing some interventions such as training to teachers and the youth.

Recommendations

- i. Formal system mapping should be done in each IYF's implemented system change programme to ensure effective intervention with specific system boundaries and actors.
- ii. Future programmes such as these should consider having clear mechanisms that ensure that the inputs towards system change from vital stakeholders such as the youth and parents are incorporated from the design stage, implementation and during monitoring of the programme outcomes and impact.
- iii. Continuous data collection targeting informing system change results such as outcomes harvests should be systematically undertaken to ensure programme outcomes are well-documented and to ensure effective adaptive management.
- iv. Consider building the capacity of other technical training course lecturers/none—life skills lecturers to use student-centred and action learning and engaging teaching skills and approaches, as is currently done by the S4L programme in South Africa, as it maximizes the learning experience.



- v. The use of digital platforms in delivering new knowledge such as life skills should be integrated in the IYF's programmes to ensure reaching many beneficiaries especially to youth in the urban and semi-urban setting with access to various IT devices and technologies.
- vi. IYF should continue designing programmes which focus on the provision of technical skills most demanded by the market by using training equipment and facilities like those used in the industry where the potential graduates will be working, as it was done in the Networking Mexico which focused less on the integration of life skills and career guidance into country's specific TVET system like in most of the sampled system change programmes to enhance youth employability.
- vii. To ensure effective engagement of stakeholders in programme such as the use of a formalized Multisectoral Committee and the Management Committee, guided by a joint roadmap for sustainability may be adopted as it was done in the Adelante programme in Peru.
- viii. In future programming, IYF should consider improving a focus on influencing local resources or system-level investments to sustain the system changes, effectively.
- ix. In system change initiatives, IYF should be systematically gathering and sharing system change success stories that describe human effects of system level change, for example, stories from teachers, administrators, employers who experience the difference; and effects of the system change on youth who the systems target.
- x. It is important for the system change programmes to consider working at all levels to ensure buyin and leadership at the top along (and a belief that the change is good for the system and for the institutional mission) and changed hearts and minds of the teachers, where they believe the change makes their lives easier, and achieves something they needed to achieve.

Conclusion

A synthesis of the processes and successes of the six selected system change projects implemented by IYF in various countries worldwide was done using the YSCLF as the analytical framework. The YSCLF was helpful because it systematically helped in synthesizing the selected projects in its nine dimensions, five enablers of system change: stakeholder collaboration; vision and goals; systems mapping; data, evaluation, and learning; and capacity development, and four domains in which systems change occurs, namely policies, services and practices, norms and mindsets, and resource flows. Most of the YSCLF parameters were used across the six programmes, but their utilization level varies across the dimensions and the programmes. For example, while some programmes such as HG, S4L, Adelante and Networking Mexico used system mapping effectively to demarcate programme stakeholders and system boundaries, Via and Equip Youth did not undertake a formal system mapping.

Besides, the shortfall of the YSCLF is that systems change programmes which are complex in nature, are not implemented linearly and as such, it may be challenging to systemize documentation of all the nine elements comprehensively. Likewise, the YSCLF does not provide room for adequate documentation of other contextual factors, for instance, which may be documented through case studies and success stories which lead to the success/failure of the programmes in realizing the system change.

To systematically maximize the impact of system change programmes, in future programmes, IYF should effectively integrate the nine dimensions of the YSCLF by specifically incorporating all the key learning questions in its nine dimensions. This will ensure each aspect resulting in effective system change is considered right from the programme's inception and continuously monitored and evaluated throughout the programme/project life cycle. Also, other elements not included in the framework, like, documentation of evidence of system change/success stories, should be continuously gathered and shared. These altogether contribute to maximizing the impact (scale, resilience and localization) of system change programmes implemented by IYF and its partners.



Summarized Synthesis for the Six Sampled Programmes

Parameter	Project Name							
	1: Via: Pathways to Work Program (Mozambique and Tanzania) (2015-2020)	2: High Gear (South Africa) (2020-2024)	3: Skills for Life (S4L) (South Africa) (2017-2024)	4: Adelante (Peru) (2018-2021)	5: Equip Youth (Palestine) (2015-2020)	6: Networking Scale (Mexico) (2019-2022)		
Enablers of system	n change							
1: Stakeholder collaboration	Youth, government institutions responsible for TVET, TVET colleges, employers, private academia	National lead partners, TVET colleges/actors, youth, automotive industry actors	Department of Higher Education and Training (DHET), TVET college, municipal governments, employers, lecturers and student	Government actors, educational institutions (secondary schools and TIHE), employers, students, teachers, and parents	Government institutions, teachers and students from VTCs and employers	National stakeholders, employers, students (young people), and parents		
2: Vision and goals	Collective behaviour of TVET system actors responds to the labour market for improved economic opportunities for young people	TVET system aligned with industry and quality course delivery for youth's improved learning and employment	TVET college system equips learners with needed life and technical skills for improved academic, workforce and employability success	Improved coordination and exchange of information between highly dynamic sectors and public education systems for improved access to high-quality secondary and vocational education to young people	Improved youth employability by equipping them with the right skills demanded by the labour market	Develop and strengthen the skills most demanded by the ICT sector to improve employability and professional prospects of young people		
3: Systems mapping	No formal system mapping was undertaken	Formal system mapping was conducted to establish stakeholders and system boundaries	Formal mapping was done to establish the problems to be addressed, vital stakeholders and financing arrangements	Formal ecosystem mapping was used to establish the extent of the problem and identify critical stakeholders	No formal system mapping was undertaken	Formal mapping was done by prioritizing stakeholders according to interests and capacity to change systems		
4: Data, evaluation, and learning	Youth-level surveys, mid- term formative evaluation, outcome harvesting, tracer study, youth outcomes study, entrepreneurship study, employer study, and market system analysis were used to inform the progamme design and interventions	Youth competency-based research, quarterly skills surveys and Power Analysis to inform design of the programme interventions, monitor the intended outcomes and influence the intended system level change	Data from TVET college systems, annual stress tests, mid-term evaluation, summative evaluation, tracer studies and employer satisfaction surveys. The obtained data are mainly used for adaptive management and monitoring the programme results	Diagnostic and situational analysis and mid-term reviews to inform stakeholders engagement strategy and overall programme implementation approaches	Baseline and pre- and post-training programme survey outcomes were mainly used for adaptive management and documentation of the project results	Labour market assessment, IT-related vacancy assessments surveys, and data from the TVET Internal data system were used to understand the constraints to be addressed and inform		



Parameter	Project Name							
	1: Via: Pathways to Work Program (Mozambique and Tanzania) (2015-2020)	2: High Gear (South Africa) (2020-2024)	3: Skills for Life (S4L) (South Africa) (2017-2024)	4: Adelante (Peru) (2018-2021)	5: Equip Youth (Palestine) (2015-2020)	6: Networking Scale (Mexico) (2019-2022)		
5: Capacity development	Built the capacity of the TVET institutions to deliver and sustain the provision of PTS and CG services which led to improved pedagogy and youth-centred approaches. Over 22,000 trained on life skills	Supports building the capacity of TVET staff and students to be engaged in practical learning for instance, through project-based and work-integrated learning	Supported integration and scaling of the PTS curriculum into the TVET system and strengthening the effective teaching resources via digitization. Building the capacity of nonelife skills lecturers to use	Provided technical assistance on curricular management processes for education system administrators to facilitate curriculum integration Trained youth on life skills to improve their learning	Supported integration of PTS through training teachers and piloting PTS in VTCs. Facilitated paid internships and provided competition-based grants to 20	the extent of achieving the intended goal Facilitated training to teachers on how to train CCNA Routing and Switching skills and competencies to the youth in CONALEP campuses. Donated IT equipment		
Domains of system	ns change		student-centred and action learning in teaching various technical courses	outcomes and employability	youth	to the campuses involved in the programme		
6: Policies/	Integrated PTS and MCMF	TVET colleges have	Integrated PTS into the LS	Incorporated PTS	VTC adopted and	30 CONALEP campuses		
system level changes	curricula into national TVET systems	aligned four courses to industry requirements. QCTO in redesigning the national TVET college engineering qualifications Developed Yakh'iFuture, a digital career experience platform owned and operated by NAACAM and integrated with the office of the Presidency's SAYouth.mobi platform to support youth transitioning to work	curriculum and piloted in 7 TVET colleges. In 2021, DHET approved the national rollout of the PTS integration, thus allowing potential integration of PTS in 50 TVET colleges across South Africa	methodologies into Institutional Educational Plans (PEI) and their Teaching Units (in the case of institutes), i.e. PTS, DTV and PBL Established and formalized a committee for overseeing soft skills strengthening process in the Moquegua region	integrated PTS and MCMF resulting into a new course: Professional Culture	in 8 states integrated CCNA Routing and Switching curricula and support equipment in their respective programmes		



Parameter	Project Name							
	1: Via: Pathways to Work Program (Mozambique and Tanzania) (2015-2020)	2: High Gear (South Africa) (2020-2024)	3: Skills for Life (S4L) (South Africa) (2017-2024)	4: Adelante (Peru) (2018-2021)	5: Equip Youth (Palestine) (2015-2020)	6: Networking Scale (Mexico) (2019-2022)		
7: Services and practices	Supported local actors to provide life skills, entrepreneurship skills, career guidance and job placement services to youth	Facilitates collaboration and partnerships between employers and public TVET colleges to ensure curricula and teaching is aligned to industry needs	Facilitates collaboration and partnerships to integrate PTS into LS curriculum and then after rolled out nationally	Influenced the training institutions to provide socio-emotional competencies to youth by using soft skills (PTS and DTV) and active learning methodologies (PBL) Influenced provision of soft skills through digital/virtual platforms (PTS Traveler	Influenced the VTCs to provide socio- emotional competencies to youth by using PTS and MCMF content and approaches	Influenced CONALEP institutions to provide industry-demanded IT technical skills and competencies to improve their employability and job retention		
8: Norms and mindsets	Change of life skills pedagogy amongst TVET teachers Improved life skills amongst young people	The programme is at the initial stage to establish changes in norms and mindset of the actors	Significant shift in using digital platforms for communication and learning. Improved teaching pedagogy to more action-oriented and student-centred approaches	Teaching strategies changed to more youth engaging and improved use of technology in learning	Changes in teaching approaches from lecturing to the action-oriented approach with students taking an active role.	Teachers have changed how they approach and engage students by using IT equipment like that used in the market.		
9: Resource flows	Funded by one donor: MasterCard Foundation. TVET changes in life skills fees structure/budget to finance delivery of PTS and CG sessions.	Funded by three donors: UK Government, USAID and Michael & Susan Dell Foundation Funds mobilized by the programme actors from various South African Funding Agencies	Funded by three donors: Embassy of Ireland in South Africa, PepsiCo Foundation and DeBeers Group DHET set aside the budget to fund LS lecturers' resources. for delivering the LS course across the 50 TVET colleges in South Africa	Funded by two donors: Anglo American Foundation and Caterpillar 28 schools created budgets to continue the new integrated services.	Funded by one donor: Caterpillar	Funded by two donors: Bécalos and Nacional Monte de Piedad		



References

- 1. Bécalos and the IYF, 2019., Planning and Design Report Skills Development Program for Employability
- 2. Bécalos and the IYF, 2021. Center for Educational and Social Studies (2021). Skills Development Program for Employability-Report up to first line of tracking
- 3. DFID/SDC, 2008. A synthesis of the Making Markets Work for the Poor (M4P) Approach. [online] Value-chains.org. Available at: http://www.value-chains.org/dyn/bds/docs/681/Synthesis_2008.pdf [Accessed 1 August 2022].
- 4. DHET, 2022. Interim Report Summary
- 5. Employer Engagement in the Context of the S4P Programme (2022)
- 6. HG, 2021. Power Analysis Brownbag
- 7. HG, 2022. Gear Year 1 Annual Report
- 8. Ignatowski, C., Blum, R., Campbell, P. and Perez-Pineda, R., 2022. *Building Youth Infrastructure: Early Lessons From the Youth Systems Collaborative*.
- 9. IYF (2021)., Analysis of the Impact on Graduates Following The Implementation of Project-Based Learning Passport To Success In Educational Institutions
- 10. IYF, 2021.Gaza case study EY Palestine final
- 11. IYF, 2022. System change Adelante Case Study
- 12. S4L Limpopo Programme, 2022. First Stress Test Report Version 1
- 13. Via Program Outcome Harvest #3 and Summative Evaluation (2021)
- 14. Via: Pathways to Work Strategic Learning Exercise, Learning Report Mozambique (2021)
- 15. Via: Pathways to Work Strategic Learning Exercise, Learning Report Tanzania (2021)