



USAID SKILLS FOR YOUTH PROJECT

Presented to: **Mujahid Saleem Farooqi**
USAID Agreement Officer's Representative (AOR)
USAID/Pakistan

Submitted by:
World Learning
Cooperative Agreement No.: AID-391-A-16-00001
September 20, 2018

FINAL PROJECT REPORT
June 16, 2016 – May 31, 2018

This report is made possible with the support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of World Learning and do not necessarily reflect the views of USAID or the United States Government.

AOR	Agreement Officer's Representative
ASC	Academy Support Center
CCNA	Cisco-certified Network Associate
CCNA-RS	Cisco Certified Network Associate – Routing & Switching
CCNA-SEC	Cisco Certified Network Associate – Security
CNA	Cisco Networking Academy
GDA	Global Development Alliance
FATA	Federally Administered Tribal Areas
ICT	Information & Communication Technology
IR	Intermediate Result
ITC	Instructor Training Center
ITQ	Instructor Trainer Qualification
GoP	Government of Pakistan
GoKP	Government of Khyber Pakhtunkhwa
LOP	Life of Project
MOU	Memorandum of Understanding
NetAcad	Networking Academies
NOC	No Objection Certificate
P&D	Planning and Development Department
PMP	Performance Management Plan
SIR	Sub-Intermediate Result
TFP	Training for Pakistan
TVET	Technical Vocational Education and Training
TVETA	Technical and Vocational Education Training Authority
USAID	United States Agency for International Development
WL	World Learning

Youth across Pakistan face challenges in gaining relevant skills that prepare them for employment. Youth in unstable areas like Khyber-Pakhtunkhwa (KP) and the Federally Administered Tribal Areas (FATA) are at a particular disadvantage, with comparatively fewer job opportunities than other areas of Pakistan. However, a growing ICT market offers a unique entry point for both skills training and employment.

The Skills for Youth Project (SYP), was a \$2.9 million pilot project funded by USAID with a 1:1 resource match from Cisco. SYP marked the first Global Development Alliance (GDA) initiative in Pakistan. The GDA mechanism is unique in that it enables the collaboration of corporate and non-profit sector organizations, for the leveraging of assets, innovations, field experiences, and networks, in order to creatively solve complex problems. During its period of performance from June 16, 2016 to May 31, 2018, SYP worked with Pakistani youth living in the critical stabilization areas of Khyber Pakhtunkhwa (KP) and the Federally Administered Tribal Areas (FATA) to equip them with certified and employable Information Communication Technology (ICT) skills. The project was designed to contribute towards improving long-term stability, economic growth, and social development of the targeted communities in KP and FATA. SYP was administered by World Learning (WL) in partnership with Cisco and the Government of KP (GoKP). As a key outcome, the project established Cisco training academies at 40 higher, vocational, and technical education institutions across nine stabilization districts of Khyber Pakhtunkhwa including: Peshawar, Nowshera, Swat, Malakand, Lower Dir, Kohat, Karak, Bannu and Dera Ismail Khan.

The project installed Cisco networking training equipment at all the partner institutions and trained 132 IT teachers (113 men, 19 women) as Cisco academy instructors to cascade the ICT skills training to students. The Cisco academies established through SYP enrolled 4533 students, of which 3592 completed their training during the life of the project. The trainees included 1443 students (531 girls; 912 boys) trained in IT Essentials, 1945 students (155 girls; 1790 boys) trained in CCNA-Routing and Switching and from this group, 204 students (15 girls; 189 boys) were selected for additional training in CCNA-Security. These ICT training courses are in great demand in the national and international industries.

Besides the Cisco training in ICT, the project trained all trainees in soft skills featuring CV writing, cover letter writing, job interviews, job search and self-employment. As a result, over 900 students completed their Cisco profiles, with more uploading the same as the project neared its completion date. On the employment side, and SYP engaged with 200 firms and 31 HR managers/recruitment firms to link graduates to employers. Three employment linkages activities were conducted, including a career-fair in coordination with Abbasyn University that resulted in over 800 SYP graduates/students in attendance. To date, 45 students have procured jobs, and over 200 have either been interviewed or are being tapped by employers for participation in an interview process.

Another major accomplishment of the project is the creation of a Cisco Academy Support Center (ASC) at the University of Engineering and Technology (UET) Peshawar. The ASC is designed to provide technical and operational support to the 40 Cisco academies created through the project.

SYP included four mutually reinforcing components:

- IR1:** The establishment of a Cisco Instructor Training Center and Academy Support Center at a public institution;
- IR2:** Increased access to ICT training for youth in KP and FATA;
- IR3:** Student training in ICT skills demanded by employers; and
- IR4:** Creating employment linkages for trained youth.

Activities carried out under each component contributed to the achievement of SYP's overall goal of improving employment opportunities in the critical stabilization areas of KP and FATA.

To implement project activities, SYP worked closely with the Government of Khyber Pakhtunkhwa (GoKP) in order to ensure ownership, coordination and allocation of resources to sustain the ICT skills training program beyond the project. In tandem with the Planning and Development (P&D) Department, Higher Education Department, the Technical and Vocational Training Authority (TEVTA), the KP IT Board and Cisco, SYP created a Project Steering Committee which oversaw its activities and addressed implementation issues.

The project raced against time to establish 40 Cisco training academies, procure hardware, train 132 instructors and enroll beyond its target of 3,200 students across nine districts in approximately 16 months. Perhaps the biggest hurdle to its gestation was a nearly six month process in obtaining the requisite approvals from the Ministry of the Interior (MoI) to initiate the project. Following this approval, SYP was launched in a formal Memorandum of Understanding (MOU) signing ceremony with GoKP, World Learning, Cisco and USAID in December 2016. It was only after this, effectively in January 2017, that the project was able to initiate installation of Cisco equipment in the selected institutions, and engage in student enrolment. Student training efforts also took longer than anticipated due to examination and vacation schedules, and the various stages that students were in within a two or four-year academic degree cycle. Additionally, faculty members' engagement with existing workloads and their perception about the ICT skills training as a stand-alone activity (and therefore an additional burden) took some time to overcome. As the project embarked on employment linkages activities, the team realized that greater time and outreach efforts were required – both to bring the trainees up to speed and to restore the confidence of potential employers about the quality of candidates produced by public institutions.

As with any pilot, there were opportunities for continuous learning and adjustment along the way. Whenever setbacks arose, the small project team was able to pivot quickly and develop customized support for partner institutions. A marker of the project's impact is that it succeeded in enrolling and graduating more than its target number of students; and that in the last rounds of enrolment, demand was higher than previously anticipated. There is typically a lag between the first cohort and subsequent ones – and the initial successes of the first enrollees combined with the responsiveness of the SYP team ensured an upward trajectory in the project's final three quarters. Interestingly, several of SYP's private partner institutions elected to incorporate the CCNA training within their core coursework.

Perhaps the greatest success of SYP is that the P&D Department elected to integrate the project's ICT skills training program into its Annual Development Plan 2017-18, paving the way for the allocation of public funding (via a PCI¹) that will prove instrumental as the project seeks to expand into a second, longer phase. In addition, the GoKP (and the members of the Project Steering Committee, as well as the Chief Economist and Chief Secretary) have been active in sharing their feedback and interest in extending the reach and scope of SYP to include additional private partners and a more comprehensive roster of course offerings.

¹ A PCI is a Planning Commission 'form' which allows for the insertion of a new budget/program head

SKILLS FOR YOUTH PROJECT - TARGETS AND ACHIEVEMENTS BY COMPONENT

JUNE 16, 2016 – MAY 31, 2018

USAID SKILLS FOR YOUTH PROJECT

Implementation Status (June 16, 2016 – May 31, 2018)

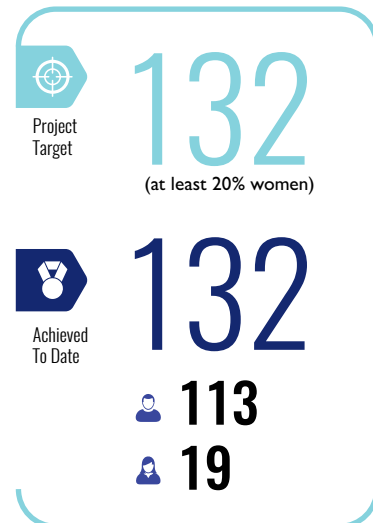
USAID DO 3: Increased stability in focus areas

IR 3.1: Use of FATA as a safe haven and incubator for extremism curtailed

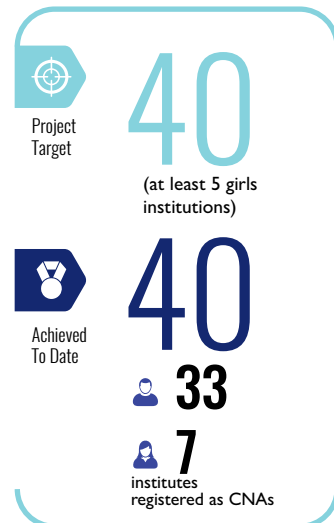
IR 3.2: Increased resilience in targeted communities vulnerable to violent extremism

Project Goal: Improved ICT skills and employment opportunities for youth in the critical stabilization areas of KP/FATA

IR 1	Pakistan's First Instructor Training Center/Academy Support Center Established for the Public Sector	
Activity	Project Target	Achievements to Date
Number of Academy Support Center (ASC) supported academies and instructors	40	40 CNAs' affiliation with ASC completed
Number of instructor trainers who attained Cisco Instructor Trainer Qualification (ITQ)	9 (at least 2 women)	0
Number of ASC established with support from the host institution	1	1 (ASC established at University of engineering & Technology Peshawar)
Number of teachers from partner institutions trained as new Cisco instructors	132 (at least 20% women)	132 (113 male & 19 Female)



Number of teachers from partner institutions trained as new Cisco instructors



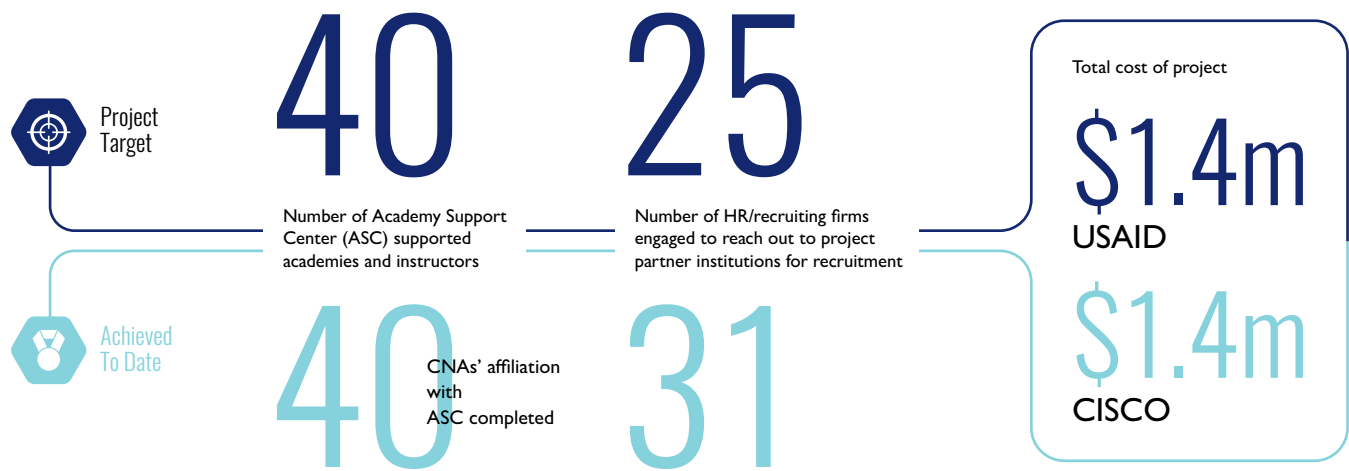
Number of partner institutions hosting CNAs



Number of students creating profiles and accessing Cisco and other online employment and business online portals

IR 2 Access to ICT Networking Training Increased for Youth in KP/FATA

Activity	Project Target	Achievements to Date
Number of partner institutions hosting CNAs (at least 5 girls institutions)	40(at least 5 girls institutions)	40 (33 Male & 7 Female institutes) registered as CNAs
Advisory Board established to contribute to strategic planning and sustain CNAs	1	1 (Project steering committee established and 2 meetings conducted at Peshawar)
Number of IT equipment bundles provided to CNAs at Cisco's discounted rates	40	40 (33 CCNA R&S and 7IT Essentials)



IR 3 Students Obtain ICT Networking Skills Demanded by Employers

Activity	Project Target	Achievements to Date
Number of Assessment studies to gauge the demand for skilled ICT workforce, opportunities and challenges	2	2 studies completed (Gender Study and Labor Market Survey)
Number of students completing IT Essentials training (at least 20% girls)	1,200 (240 female & 960 male)	1443 (912 Male & 531 Female)
Number of students completing CCNA Routing and Switching training (at least 20% girls)	1,800 (360 female & 1,440 male)	1945 (1790 Male & 155 Female)
Number of students completing CCNA Security training (at least 20% girls)	250 (50 female, 200 male)	204 (189 Male & 15 Female)
Type of scholarships, gender, geographic region, disability	400 (250 for CCNA Security and 150 for students from FATA and marginalized segments)	325 Scholarships disbursed 202 of CCNA Security 123 from FATA and Marginalized segments

IR 4 Employment Linkages for Youth Created

Activity	Project Target	Achievements to Date
Number of HR/recruiting firms engaged to reach out to project partner institutions for recruitment	25	31
Number of students creating profiles and accessing Cisco and other online employment and business online portals	1,000	944 (741 Male & 203Female)
Employment Linkages Committee (ELC) established and engaged in creating employment linkages	1	0 TOR for ELC developed and being reviewed by Cisco
Percentage of graduating students who secure employment	30%	45
Number of employment linkage activities organized	7	3
Number of employers engaged to recruit from partner institutions	Up to 200	200
Total cost of project: Equal cost shar; \$1.4 million USAID; \$1.4 million CISCO		

TABLE OF CONTENTS

ACRONYMS 2	EXECUTIVE SUMMARY 3	I. PROJECT RESULTS OVERVIEW 5	RESULTS FRAMEWORK 10	USAID STANDARD INDICATORS 12	CUSTOM INDICATORS 13
PROJECT ACCOMPLISHMENTS 14	OBJECTIVE 1: PAKISTAN'S FIRST INSTRUCTOR TRAINING CENTER/ACADEMY SUPPORT CENTER ESTABLISHED FOR THE PUBLIC SECTOR 15		CCNA ROUTING & SWITCHING 17	OBJECTIVE 2: ACCESS TO ICT NETWORKING TRAINING INCREASED FOR YOUTH IN KP/FATA 18	
OBJECTIVE 3: STUDENTS OBTAIN ICT NETWORKING SKILLS DEMANDED BY EMPLOYERS 20		OBJECTIVE 4: EMPLOYMENT LINKAGES FOR YOUTH CREATED 24		SOFT SKILLS TRAINING 25	II. CHALLENGES 26
III. LESSONS LEARNED AND RECOMMENDATIONS 28	IV. SCALE-UP STRATEGIES 34	A. Scale-up Strategy 1: Enhancing the depth of services offered to students 34	B. Scale-up Strategy 2: Selective Geographic and Institutional Expansion 37	39	



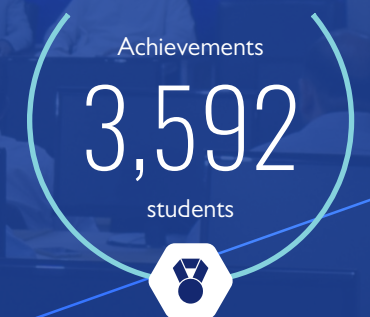
DO3 IR 3.1.1 (b):
Number of government officials with increased targeted competencies



DO3 IR 3.1.4 (c):
Number of persons receiving new employment or better employment as a result of participation in USG-funded workforce development programs



DO3 IR 3.2.1 (b):
Number of persons receiving training on skill development



SYP THEORY OF CHANGE AND RESULTS FRAMEWORK

SYP was a pilot program designed to respond to the workforce development and education needs of youth in the key stabilization areas of KP and FATA. The program design was based on the following theory of change:

IF Cisco Networking Academies are established and supported with the purpose to enhance instructors' qualifications, **THEN** more youth will have access to better ICT training, and

IF students acquire ICT Networking skills demanded by employers,

THEN private sector employers will create and maintain employment linkages with students.

SYP's M&E approach focused on piloting and implementing mechanisms for achieving results so that these can be scaled up in the future. The M&E activities for the project included a gender assessment and labor market study, regular monitoring tools, and Cisco's online technical monitoring of instructor and student training. Cisco's monitoring included academy registration, enrollment numbers, student and instructor learning outcomes and gender participation. To supplement Cisco's online monitoring, SYP's M&E team collected regular monitoring data on enrollment, completion, academy registrations, and job placement from each of the participating institutions, as well as success stories. The M&E activities explored how the instructor training and Cisco Academies helped partner institutions and instructors to deliver ICT training to their students and prepare them for the job market.

In terms of the USAID strategy, this pilot project responded to USAID/Pakistan's Development Objective 3: Stabilization. The lack of opportunity to rebuild lives affected by conflict, the lack of economic opportunities, and the lack of access to justice and social services for populations vulnerable to extremist ideology are engines of instability that affect all of Pakistan. Addressing these challenges are critical elements of the Government of Pakistan and USG efforts to make Pakistan inhospitable to extremists. Moreover, these stabilization outcomes are foundational to the achievement of sustainable development results and are complementary to other key development initiatives throughout the country. The figure below illustrates the project's results framework based on the development objectives of USAID/Pakistan.

Figure 1.
Skills for Youth Project Theory of Change

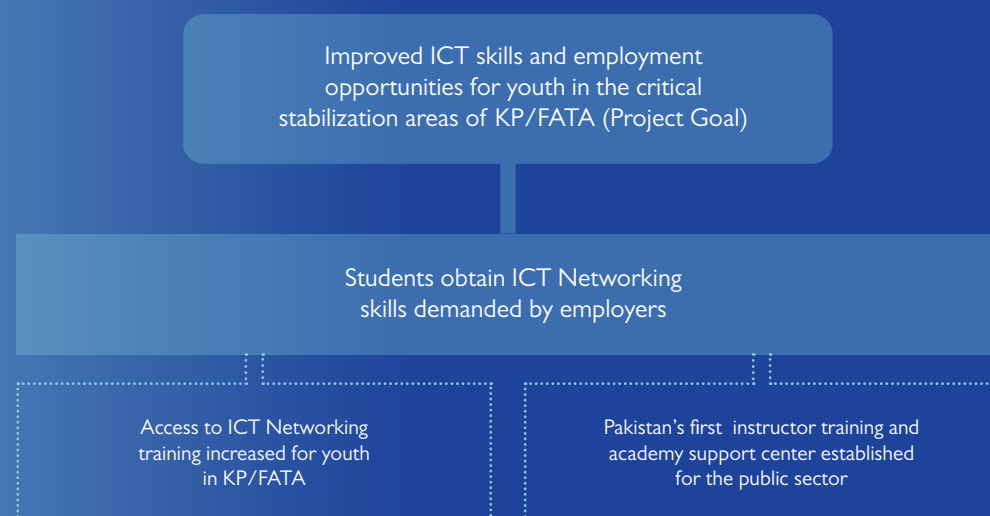
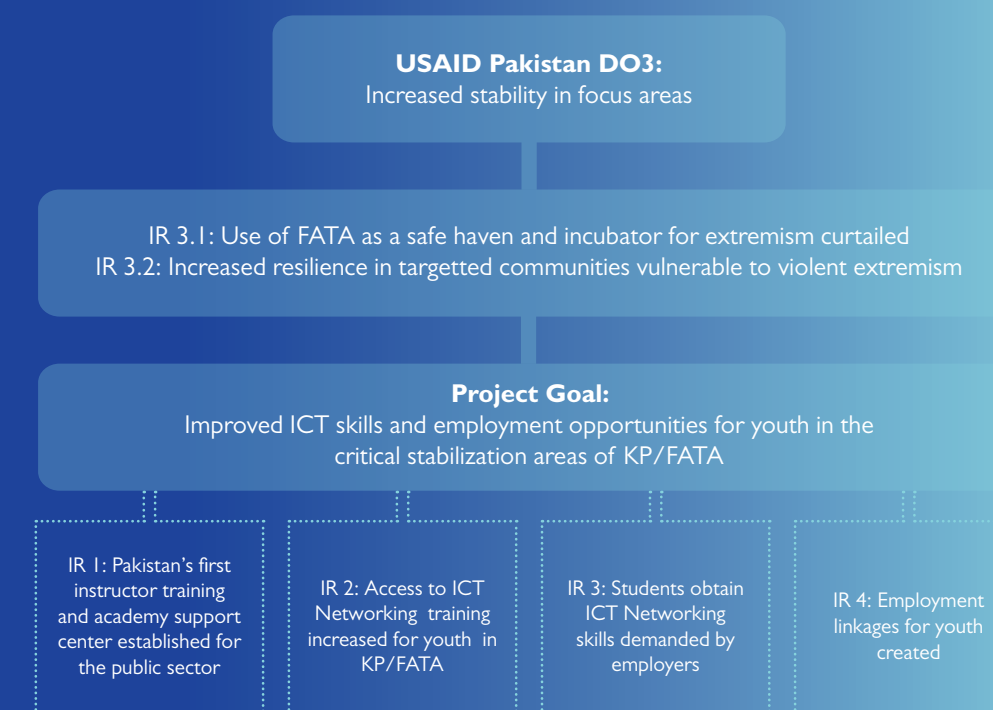


Figure 2.
USAID Skills for Youth Results Framework



The project developed its logical framework and M&E plan based on the above-mentioned results. The M&E team collected data and reported on the following three USAID standard and 18 custom indicators:

USAID STANDARD INDICATORS

- DO3 IR 3.1.1 (b): Number of government officials with increased targeted competencies;
- DO3 IR 3.1.4 (c): Number of persons receiving new employment or better employment as a result of participation in USG-funded workforce development programs;
- DO3 IR 3.2.1 (b): Number of persons receiving training on skill development.

CUSTOM INDICATORS

IR 1 Pakistan's First Instructor Training Center/ Academy Support Center Established for the Public Sector

1. Number of Academy Support Center (ASC) trained instructors;
2. Number of instructor trainers who attained Cisco Instructor Trainer Qualification (ITQ);
3. Number of ASC established with support from the host institution;
4. Number of teachers from partner institutions trained as new Cisco instructors.

IR 2 Access to ICT Networking Training Increased for Youth in KP/FATA

5. Number of partner institutions hosting CNAs (at least 5 girls' institutions);
6. Advisory Board established to contribute to strategic planning and sustain CNAs;
7. Number of IT equipment bundles provided to CNAs at Cisco's discounted rates.

IR 3 Students Obtain ICT Networking Skills Demanded by Employers

8. Number of Assessment studies to gauge the demand for skilled ICT workforce, opportunities and challenges;
9. Number of students completing IT Essentials training (at least 20% girls);
10. Number of students completing CCNA Routing and Switching training (at least 20% girls);
11. Number of students completing CCNA Security training (at least 20% girls);
12. Type of scholarships, gender, geographic region, disability.

IR 4 Employment Linkages for Youth Created

13. Number of HR/recruiting firms engaged to reach out to project partner institutions for recruitment;
14. Number of students creating profiles and accessing Cisco and other online employment and business online portals;
15. Employment Linkages Committee (ELC) established and engaged in creating employment linkages;
16. Percentage of graduating students who secure employment;
17. Number of employment linkage activities organized;
18. Number of employers engaged to recruit from partner institutions.

PROJECT ACCOMPLISHMENTS



Immediately upon award, in June 2016, World Learning (WL) hired two key members of the project team. The team in collaboration with USAID and Cisco coordinated a series of preliminary meetings with relevant government counterparts in Peshawar. Meetings with Khyber Pakhtunkhwa P&D Department, Higher Education Department, Technical Education and Vocational Training Authority (TEVTA) and IT Department helped secure buy-in from the provincial government. The project kept the momentum of this collaborative process by crafting the project MOU in consultation with all key stakeholders. After an extensive review by five provincial government departments, the MOU was signed in December 2016 at a high level project launch ceremony in Peshawar attended by senior U.S Government and GoKP officials.

After the MOU signing, the project kicked off its training activities with the orientation of key officials from the counterpart GoKP departments and partner institutions. In these orientation sessions organized in December 2016, senior officials from the Higher Education Department, IT Department, IT Board and TEVTA were briefed on the project objectives, strategies, and expected outcomes. Secretary IT along with the Managing Director IT Board, TEVTA Director and WL Country Representative attended the orientation session. This was followed by two major activities: selection of teachers from 40 partner institutions for Cisco instructor training; and process initiation for registration of partner institutions as Cisco Networking Academies. The project trained first two batches of 40 teachers from the nine district as Cisco Academy Instructors in December 2016 and January 2017. The training of 132 instructors led by Project's technical lead and Cisco Instructor Training Center continued in several batches till August 2017.

The section below describes and analyzes SYP's achievements under each of the following four project results:

- Pakistan's first instructor Training Center/Academy Support Center established for the public sector;
- Access to ICT Networking training increased for youth in KP/FATA;
- Students obtain ICT Networking Skills demanded by employers;
- Employment linkages created for youth.

OBJECTIVE 1:

PAKISTAN'S FIRST INSTRUCTOR TRAINING CENTER/ACADEMY SUPPORT CENTER ESTABLISHED FOR THE PUBLIC SECTOR

Key accomplishments under this program objective include the establishment of a Cisco Academy Support Center (ASC) at UET Peshawar; training of 132 IT teachers from partner institutions as Cisco instructors; and capacity development of the ASC to provide ongoing support to Cisco instructors and academies.

ESTABLISHMENT OF ACADEMY SUPPORT CENTER

A Cisco Academy Support Center (ASC) is mandated to provide ongoing support to Cisco Networking Academies (NetAcads) once they are established. ASC services include operational and technical support such as finalizing specifications of new hardware or an operating system required for a NetAcad. An ASC also supports all affiliated NetAcads to update or revise their training curriculum and scheme of studies, as needed.

The project initiated the selection process by identifying four of the 40 partner institutions and counterpart departments with the potential to host the ASC. These institutions included the Islamia College University, UET Peshawar, Institute of Management Sciences, and the Information Technology (IT) Board. The project team conducted a detailed assessment of two of the four institutions including Islamia College University and UET Peshawar. The remaining two institutions, Institute of Management Sciences, and IT Board opted out voluntarily. The assessment indicated that UET Peshawar was most appropriate for then ASC based on a number of factors, including the 1) readiness and motivation of the head and faculty of the Computer Systems Engineering Department; 2) number of potential students to enroll in Cisco trainings; 3) willingness to ensure sustainability of ASC beyond the project; and 4) availability of space and facilities within the university campus to host the ASC.

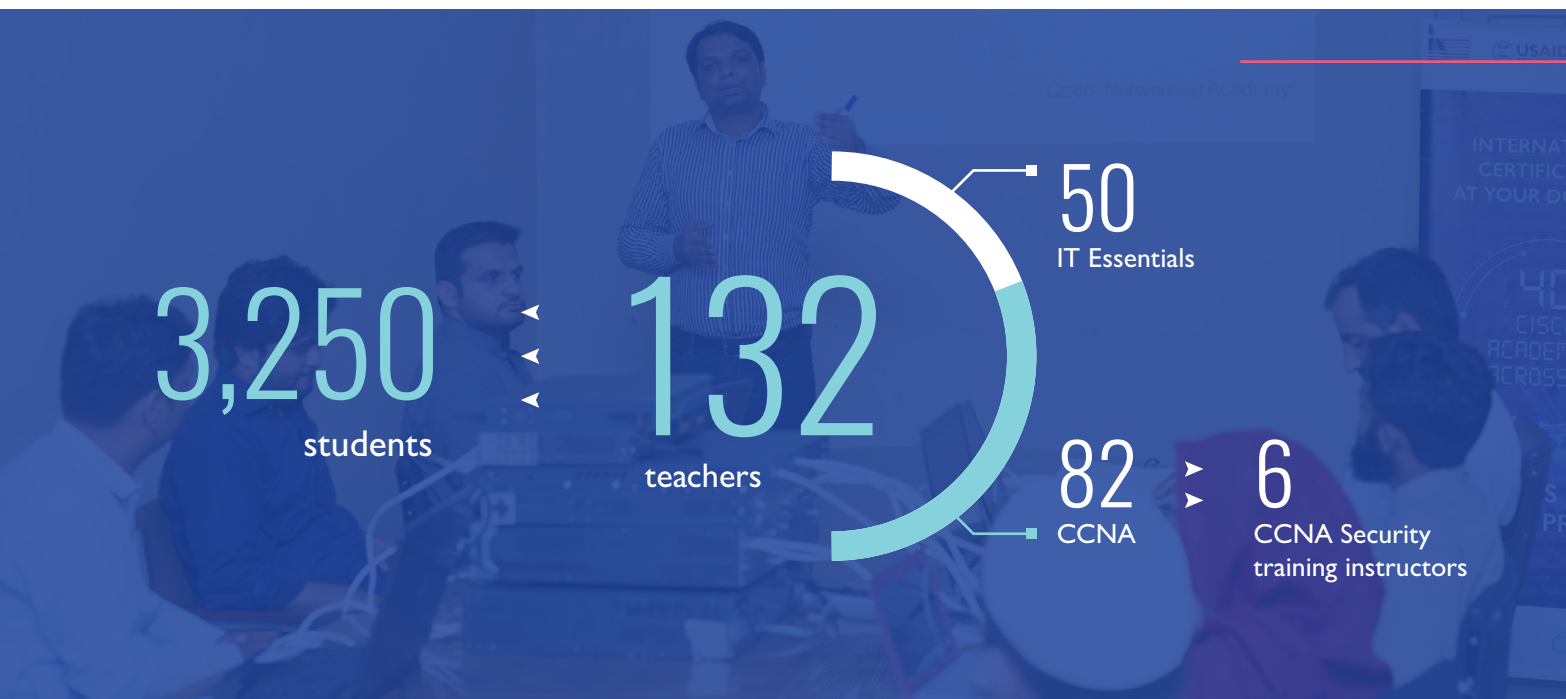
ASC Selection Criteria

- Dedicated Room for ASC office
- Availability of computers for ASC staff members
- High speed internet
- Landline phone to contact affiliated NetAcads
- Backup power availability for equipment
- Scanner availability
- Printer availability
- Availability of ICT qualified HR



Following the assessment and selection of UET Peshawar the project signed an MoU with the University to establish the Academy Support Center (ASC). During the MOU signing ceremony, the Vice Chancellor lauded the project and USAID for supporting UET Peshawar in its effort to train the students in ICT skills and prepare them for employment. He emphasized the university's commitment to ensure that the newly created ASC will serve as a hub for affiliated Cisco Academies in Khyber Pakhtunkhwa. As agreed in the MoU, UET Peshawar provided space to host the ASC office and Cisco NetAcad. The project prepared the room and equipped it with furniture, IT equipment and accouterments.

In addition to the ASC office setup, SYP provisioned and established a training facility within the ASC premises which had the capacity for an additional 20 students, a 'discussion corner' and a fixed, multi-media projector. These additions will enable the ASC to arrange for refresher trainings for instructors, and to stay abreast of curriculum upgrades/ trainings for established/affiliated NetAcads. By keeping longer-term functionality and sustainability in mind, SYP also established a fully functional guided and non-guided networking setup with the installation of an additional Cisco training rack within the ASC facility. In its capacity as Cisco's first such initiative for the public sector institutions, the ASC at UET Peshawar is supporting 40 Cisco NetAcads across nine districts of Khyber Pakhtunkhwa.



TRAINING OF INSTRUCTORS

Over the course of the project, SYP planned to train 132 teachers from 40 partner institutions as Cisco Academy Instructors. These trained academy instructors were responsible for training 3,250 students in three Cisco certified training courses, including IT Essentials, CCNA Routing & Switching (R&S), and CCNA Security. Of the 132 instructors, 50 were to receive training in IT Essentials and 82 in CCNA. From among the 82 trained CCNA Instructors, 6 were selected for additional training as CCNA Security training instructors.

IT ESSENTIALS

The IT Essentials training course covers fundamental computer skills for entry-level IT jobs. The training includes hands-on labs to provide practical experience and simulation tools to help students improve PC Level troubleshooting skills. Job opportunities after completing this course can include IT Support officer, IT Technician, Network Support assistant, Help desk Support Engineer, and entry level IT Engineer.

The project selected and trained 50 IT teachers as IT Essentials (ITE) instructors over ten days. The trained instructors included 37 male and 13 female IT teachers from across partner institutions. The training of instructors in ITE was initiated immediately after signing of the project MOU in December 2016. ITE instructors trained over 1,200 students. One of the female instructors (Ms. Farzana Tahir) from Government Technical and Vocational College for Women, Hayatabad in Peshawar pioneered student training on ITE and trained 113 girls students in two batches. Following the training, she also helped six trainees to obtain jobs. Overall, the ITE training was useful in helping students demonstrate their ICT skills in addition to other core job requirements.

CCNA ROUTING & SWITCHING

CCNA R&S is a gateway to networking jobs in IT and business sector. It is designed to prepare students to plan, deploy, maintain and troubleshoot small to medium size IP data networks. After completion of the course, students can join as Level I Network Technicians, Support Engineers, Network Administrators, Network Designers, Network Engineers, Telecom Site Engineers, Back-end Support Engineers or Data Center Support Engineers.

In total, SYP trained 76 IT teachers as CCNA instructors. The first batch of 30-day training started in the last week of December 2016 by enrolling 21 male IT teachers from partner institutions. Prior to the training the project collected profiles of 89 IT teachers from partner institutions and selected the teachers for training in batches at different intervals based on their availability from teaching routines. The instructors and their institutions were notified through the Higher Education Department and TEVTA. The second group of 20 teachers (2 female, 18 male) commenced on January 16, 2017 at the Islamia College University in Peshawar. The remaining 35 CCNA instructors were trained in two batches. One Cisco-certified instructor trainer from the Cisco Instructor Training Center along with a training assistant and the SYP Technical Adviser, delivered the "hands on" training that featured ample opportunities for practice.

CCNA R&S Instructor Training

- 30-day training
- 4 modules and a bridging course
- IT Networking from fundamentals to advanced applications and services in IT networking
- Hands-on practical experience and career skills development
- CV building and interview skills



CCNA SECURITY

CCNA Security prepares students to design, implement, support and troubleshoot security for networks. The course builds on the basics of CCNA Routing & Switching training. It adds a security and network security threats elimination and mitigation specialty to students' CCNA networking skills and expand their career opportunities. Possible opportunities after the training can include Network Security Specialist, Security Administrator, Network Security Engineer, Back-end Network Security Support Engineer etc.

Based on the assessment and performance of partner institutions, the project selected 6 CCNA instructors from 6 institutions to further train them as CCNA Security instructors. These instructors underwent an intensive training administered by Cisco ITC and SYP's Technical Adviser over ten days, and included additional three days for an instructor-led demonstration/workshop. Following the training these instructors trained 204 students in CCNA Security.

CCNA INTERNATIONAL CERTIFICATION EXAM

In response to requests from the Khyber Pakhtunkhwa IT Board to support the CCNA instructors to take Cisco's international certification exam, the Project reached out to all 76 CCNA instructors to assess their interest in this exam. Of these, 29 instructors indicated interest in this certification. The project provided a two-day exam preparation orientation to these teachers in Peshawar and Malakand in July 2017.

11 of 29 instructors (2 female and 9 male) took the Cisco industrial certification exam and 6 teachers (4 male; 2 female) obtained the certification. Although Cisco neither required nor recommended this level of certification as essential for instructors to administer the training courses, the project team determined that supporting this activity was essential for ensuring the continued support of the GoKP.

OBJECTIVE 2: ACCESS TO ICT NETWORKING TRAINING INCREASED FOR YOUTH IN KP/FATA

Activities under this program component were designed to strengthen systems and institutions in the public sector to deliver relevant and in-demand ICT skills training programs. Major activities under this component include establishing a partnership with GoKP; selection and registration of partner institutions with Cisco; provision of IT networking training equipment to participating institutions; and formulation of an Advisory/Steering Committee to provide program implementation oversight and foster the long-term sustainability of the initiative.

COORDINATION WITH GOVERNMENT FOR STUDENT TRAINING

From the outset, SYP coordinated closely with key government stakeholders and counterparts including the P&D Department, Higher Education Department, TEVTA, IT Board and heads of institutions to coordinate project activities across the nine intervention districts and 40 institutions. Coordination meetings and orientation sessions with senior officials and heads of partner institutions resulted in ownership of the program and better planning of the instructor and student training.

Close collaboration with GoKP also helped the creation the Project Steering Committee under the auspices of the Additional Chief Secretary, P&D Department convened. Drawing membership from the counterpart government departments, USAID, Cisco, business and industry, the Steering Committee provided a forum to guide the project to achieve its programs goals and review project achievements as well as options for resolving challenges.

TORs of the Steering Committee will be included as an Annex in the final project report.

REGISTRATION OF PARTNER INSTITUTIONS AS CISCO NETWORKING ACADEMIES

Following selection of 40 eligible institutions from the nine intervention districts, the project initiated the process with Cisco to fulfill all requirements for registration of the institutions as Cisco Networking Academies. Cisco registration is a prerequisite for every Cisco partner institution to enroll students in Cisco trainings and be eligible for discounts on IT networking training equipment and certification exam fees. Additionally, by becoming a registered Cisco Academy, an institution is able to access a plethora of training materials and learning resources designed by industry and education experts. Registered institutions also access various quality assurance tools and Cisco's Networking Academy Management Systems. Once enrolled at a Cisco Networking Academy, the students have access to hands-on training and student-centered learning in a variety of IT related fields. The project team assisted all 40 partner institutions to register as Cisco Academies. Following their registration, the partner institutions were also linked with the newly established ASC.

It was for the first time 40 educational institutions including 37 public and 3 private institutions in KP were recognized as Cisco Networking Academies through the project.

PROVISION OF IT EQUIPMENT TO 40 PARTNER INSTITUTIONS

Following a comprehensive competitive bidding process, the project selected a high ranking Cisco licensed firm in Pakistan to supply and install the IT networking training equipment at 34 of the 40 partner institutions selected to offer the CCNA training. The equipment is meant to support partner institutions to deliver hands-on CCNA training to over 2,200 students. The remaining six partner institutions were selected to offer the training only in IT Essentials, hence these institutions received sets of IT equipment tailor-made to support the IT Essentials training.

In August 2017, the project team organized a ceremony in collaboration with the Government Post-graduate College Matta in Swat to transfer IT equipment and launch the first Cisco Networking Academy at the host college. The Provincial Minister for Sports, Culture, Archeology, Museums and Youth Affairs was the chief guest at the ceremony attended by local government officials, Principals of neighboring colleges, faculty and students of the host college. Prior to the equipment transfer, the Minister unveiled a plaque to inaugurate the new Cisco Networking Academy at the Post-graduate College.

Other partner institutions including the Shaheed Benazir Bhutto Women University (SBBWU) and GTC Hayatabad in Peshawar also organized similar events to celebrate the establishment of Cisco Academies. SBBWU thanked USAID for supporting the first women university of Khyber Pakhtunkhwa. The Vice Chancellor lauded the Cisco Academy established through the project and guaranteed that it would play a key role in preparing young girl students for IT-related jobs.

A list of IT equipment provided to partner institutions is enclosed as Annex X.

INTEGRATION OF CERTIFICATION COURSES INTO CURRICULUM

Integration of certification courses is an indicator of the sustainability of project resources. Although, this was not an indicator in the original M&E framework, the SYP project team successfully supported Abasyn University in figuring out the core courses and alignment with Cisco NetAcad programs. As a result, Abasyn University Peshawar (a private university) included the IT Essentials and CCNA Routing and Switching within their regular BS and MSC coursework. What this means is that any student starting their first semester with an Introduction to ICT course, which is a required subject within the BS, MSc (IT,CS)) degree program, will automatically be enrolled by the University into Cisco NetAcad's IT Essentials course. The university faculty decided on this approach given the many similarities and the introductory nature between their courses and the Cisco course. Similarly, CCNA RS has been associated by the university into Data Communication, Computer Networks and Advance computer networks subjects. This enables students to seamlessly obtain globally standardized course content and access to certification, while completing their degree programs.

Along the same lines, Qurtuba University, DI Khan and City University Peshawar are also working to integrate the SYP supported/Cisco provided training courses within their regular curriculum. In addition to the courses provided by SYP, universities are requesting CCNA Security, Cyber Ops and Internet of Things courses (offered by Cisco) for integration within their course curricula.

"Information Technology in today's world has permeated almost every field of life. It has transformed the way we live in the modern world. Our country, and especially Khyber Pakhtunkhwa has enormous potential to benefit from IT. The Skills for Youth Project is a step in the right direction to train our youth in market-oriented information technology skills."

- **Mahmood Khan**,
Provincial Minister for Sports, Culture, Archeology, Museums and Youth Affairs

OBJECTIVE 3: STUDENTS OBTAIN ICT NETWORKING SKILLS DEMANDED BY EMPLOYERS

Student training by the teachers trained as Cisco Academy Instructors through the project is the primary activity under this component. As noted earlier, the instructors trained through the project administered three different courses (IT Essentials, CCNA R&S, and CCNA Security) to 3592 students across the nine intervention districts.

COURSE OVERVIEW AND SELECTION CRITERIA

Type of Training	IT Essentials	CCNA Routing & Switching	CCNA Security
Purpose	The IT Essentials training course covers fundamental computer skills for entry-level IT jobs. The training includes hands-on labs to provide practical experience and simulation tools to help students improve troubleshooting skills. Job opportunities after completing this course can include IT Support, IT Technician, Network Support, Help desk Support Engineer, and entry level IT Engineer.	CCNA Routing and Switching is a gateway to networking jobs in IT and business sector. It is designed to prepare students to plan, deploy, maintain and troubleshoot small to medium size IP data networks. After completion of the course, students can join as Level I Network Technician, Support Engineer, Network Administrator, Network Designer, Network Engineer, Telecom Site Engineer, Back-end Support Engineer or Data Center Support Engineer.	CCNA Security prepares students to design, implement, support and troubleshoot security for networks. The course builds on the basics of CCNA Routing & Switching training. It adds a security and network security threats elimination and mitigation specialty to students' CCNA networking skills and expand their career opportunities. Possible opportunities after the training can include Network Security Specialist, Security Administrator, Network Security Engineer, Back-end Network Security Support Engineer etc.
Duration	Up to 2 months	2-4 months	Up to 1 month
Selection Criteria	<ol style="list-style-type: none"> 1. Students domiciled in any district of Khyber Pakhtunkhwa and any agency/Frontier Region of FATA. 2. Both boys and girls are eligible to enroll. 3. Minimum age should be 16 years. 4. Must be intermediate/higher secondary school level students such as FSc/ICS/Diploma in IT etc. 5. Students both with and without an IT background can apply. 6. No pre-qualification test is required to enroll in the program. 	<ol style="list-style-type: none"> 1. Students domiciled in any district of Khyber Pakhtunkhwa and any agency/Frontier Region of FATA are eligible. 2. Both boys and girls can apply. 3. Minimum age should preferably be 18 years. 4. Students studying at Bachelor's/Master's level (BSIT, BSCS, MSIT, MCS, engineering or equivalent IT disciplines) 5. Students who completed these degrees are also eligible 6. An IT background and qualification is mandatory. 7. No pre-qualification test is required to enroll in the program. 	<ol style="list-style-type: none"> 1. Students domiciled in any district of Khyber Pakhtunkhwa and any agency/Frontier Region of FATA are eligible. 2. Both boys and girls can apply. 3. Minimum age should preferably be 18 years. 4. Students studying at Bachelor's/Master's level (BSIT, BSCS, MSIT, MCS, engineering or equivalent IT disciplines) 5. Students who completed these degrees are also eligible 6. An IT background and qualification is mandatory. <p>No pre-qualification test is required to enroll in the program.</p>

STUDENT TRAINING IN IT ESSENTIALS

Over the course of the implementation period, SYP enrolled a total of 1443 students in IT Essentials (ITE) (531 female; 912 male), exceeding the project target of 1,200. The table below shows the number of students trained in ITE by district:

District	No. of ITE Graduates		Total
	Boys	Girls	
Peshawar	360	376	736
Nowshera	56	0	56
Kohat	10	45	55
D.I. Khan	32	99	131
Karak	0	0	0
Bannu	34	1	35
Malakand	26	9	35
Dir Lower	105	1	106
Swat	289	0	289
TOTAL	912	531	1443

STUDENT TRAINING IN CCNA ROUTING & SWITCHING

The project selected 35 partner institutions to provide CCNA R&S training to approximately 1,800 students. These institutions also included the six institutions selected to conduct training in both CCNA R&S and CCNA Security.

The Gomal University in D.I. Khan was the first partner institution to initiate student training in CCNA R&S by enrolling 70 students. The University of Malakand started CCNA R&S classes for students soon after their instructors completed the instructor training. The University enrolled 50 students. In total, the project trained 1945 students (155 female; 1790 male) in CCNA R&S. The table contains the number of CCNA R&S graduates by district:

District	No. of CCNA R&S Graduates		Total
	Boys	Girls	
Peshawar	942	47	989
Nowshera	61	0	61
Kohat	55	62	117
D.I. Khan	278	45	323
Karak	42	0	42
Bannu	0	0	0
Malakand	141	0	141
Dir Lower	167	1	168
Swat	104	0	104
TOTAL	1790	155	1945

STUDENT TRAINING IN CCNA SECURITY

CCNA Security is a Cisco training program that prepares students to design, implement, and support security for networked devices. The course builds on the CCNA R&S training. It adds a security specialty to students' CCNA networking skills to expand their career prospects. To complete the training course, students are required to complete attendance and assessment requirements and are issued a Cisco certificate at the end of the training course. The project target for CCNA Security was the training of 250 high performing trainees of CCNA R&S selected from all the nine intervention districts. The table below shows CCNA Security students by district:

District	No. of CCNA Security Graduates		Total
	Boys	Girls	
Peshawar	87	4	91
Nowshera	0	0	0
Kohat	1	4	5
D.I. Khan	36	6	42
Karak	0	0	0
Bannu	0	0	0
Malakand	8	0	8
Dir Lower	28	1	29
Swat	29	0	29
TOTAL	189	15	204

STUDENT SCHOLARSHIPS

The project planned to award scholarships to 400 students falling in two categories. The first category included 250 top performing students in CCNA R&S selected for CCNA Security training. The second type of 150 scholarships was meant to encourage participation of girls and students from FATA and those with disabilities. At close, the project awarded a total of 323 (i.e., 200+123) scholarships to students. Of these, 202 were for students who successfully completed CCNA Security training and 123 were for students from FATA and marginalized socio-economic segments.

OBJECTIVE 4: EMPLOYMENT LINKAGES FOR YOUTH CREATED

Major activities under this key component included engaging partner educational institutions, government counterparts and the private sector to create employment linkages for trainees. It also included creation of an Employment Linkages Committee in collaboration with Cisco to engage with industry and businesses to employ youth trained through the project. Other key interventions feature activities such as employment fairs, awareness-raising events, trainings, and similar interventions to invite private sector actors to employ skilled youth. The project team reached out to more than 300 employers, and over 30 HR managers/recruitment firms. Unfortunately, given the project's duration and the timelines overall with student graduation, the length of time required to transition from interview to job, and gaps in students' employability skills/employer readiness SYP was not able to meet its target of 30% employment of CCNA graduates. Although over 800 students attended the job fair, and over 300 participated in an interview process, to date only 45 students have secured employment. World Learning intends to track students using email and SMS to see how many more will secure employment over the next six months. We anticipate that this number will rise significantly, although it will still fall short of the program's target of ensuring employment for over 600 graduates. It is important to note that the SYP pilot project target for CCNA graduate employment was not based on a labour market analysis, nor were they drawn from employer consultations. In a subsequent project, it will be important to conduct a much deeper analysis to appropriately map employment targets for graduates for each specific course. As an example, and with the benefit of hindsight, it may have been better to have set higher targets for IT Essentials graduates (who could perhaps be employed in a broader variety of jobs) versus CCNA graduates (who perhaps require more specialized job opportunities).

EMPLOYMENT LINKAGE ACTIVITIES

SYP arranged three employment linkage activities. Each followed a different model and resulted in useful learnings.

Event 1: SYP arranged an employers' gathering/career day for training graduates. Twelve local employers participated in the event and interviewed 76 students in Peshawar.

Event 2: A mega job fair was conducted in Peshawar in collaboration with Abasyn University (a SYP Partner Institute). Fifty employers participated in the event from Peshawar and Islamabad, and 3,000 attended from different educational institutions. SYP invited its trained students from northern and southern districts to connect with employers in the event. Over 300 interviews of SYP students were conducted by employers at the job fair.

Event 3: Interviews with Nayatel Pvt Ltd were held in Peshawar, by the Nayatel HR team. SYP students were prepared ahead of time for the interview process, and over 13 students are currently in the Naytael HR pipeline.

"This session was fruitful for all of us. I now know how to develop my CV. The CV is the document that present me in front of an employer. I am already doing a part time job. After the IT Essentials training I am hoping to have more challenging opportunities in the IT Sector."

- **Abdullah Jan,**
a student of IT Essentials
at Abasyn University

SOFT SKILLS TRAINING

SYP developed a module to enhance students' soft skills such as CV writing, cover letter writing, job interviews, job search and freelancing. Using this module, the project enrolled 4,491 students and 3,592 successfully completed the training across the nine intervention districts. Government Technical & Vocational Training Centre for Women Hayatabad, Government College of Management Sciences, and Abasyn University. In Peshawar piloted the soft skills training, which was later extended to the remaining partner institutions.

This course applies an experiential learning methodology, including an emphasis on concrete experience; reflection on that experience; exploration of theories, concepts, and information to deepen understanding; and planning for new and more effective experiences. The emphasis in this training course is on real, meaningful exercises that lead to a useful product such as identification of relevant job posts, a LinkedIn profile, and a CV. These exercises take the form of guided practice, with an instructor present throughout to assist the students in applying the new ideas and skills gained through the course. The soft skills training team used Google Forms to collect and immediately process M&E data, administering a computer-based pre-test and a post-test to all participants. On average, participants' job search knowledge and attitudes increased 72% above their pre-test scores." The team received overwhelmingly positive feedback from students after these career guidance sessions, which was being offered for the very first time at these institutions.

As a result of the soft skills training, 900 students developed their CVs and profiles and uploaded them on the Cisco portal, with more in progress as the project neared completion.

CHALLENGES

DELAYS IN SIGNING PROJECT MOU

Early in August 2016, SYP in consultation with USAID developed an MOU for implementation of project activities in the designated stabilization districts of Khyber Pakhtunkhwa. The MOU draft was submitted to the P&D Department for review and signature. The document underwent a thorough review by five provincial government departments, including Higher Education Department, TEVTA, Department of Industries, Social Welfare Department and Home Department. In addition, the Chief Economist and Chiefs of Industries and Education within the P&D Department also reviewed the MOU. Following its final approval, the P&D Department authorized the Khyber Pakhtunkhwa IT Board to sign the MOU on behalf of GoKP. The MOU review and approval process spanned nearly five months, with numerous meetings and consistent follow-ups required with all the relevant departments and officials. This initial delay impacted instructor training and registration of partner institutions with Cisco, which resulted in delays in student training.

UNAVAILABILITY OF INSTRUCTORS AND STUDENTS DUE TO VACATION AND EXAM SCHEDULES

Student training took longer than anticipated due to examination and vacation schedules during which students and teachers were not available to participate in courses. The project intervention districts and partner institutions fell in two zones (i.e., the winter zone and summer zone). In the winter zone, all educational institutions remained closed from December through February. Students and especially teachers were reluctant to administer or participate in ICT training courses during winter vacation periods. In the summer zone, it was difficult to run the training from March through May as most of the students were busy preparing for their terminal exams. The vacation and examination schedule impacted both the instructor and student training. To overcome the challenge, the project engaged the heads of institutions/ departments to persuade instructors to run the student training during vacations. The strategy was partially successful.

UNAVAILABILITY OF IT QUALIFIED WOMEN TEACHERS

The project faced significant challenges in recruiting IT qualified women instructors. The few qualified female teachers who trained as Cisco instructors, found it difficult to manage the CCNA training within their existing teaching schedules. They found it hard to integrate CCNA training into the IT networking syllabus they were already teaching. Participation of women teachers in the CCNA instructor training was also a big challenge for several reasons. Firstly, they had never participated in a hands-on IT networking training before and found it challenging to keep up with the pace of instruction. Secondly, it was hard for them (and for the male teachers as well) to look beyond the traditional method of lecturing and adopt the hands-on approach. Thirdly, for some the 30-day duration of CCNA instructor training was too long a time to be away from their homes. Organizing the CCNA training closer to homes was a challenge for the project due to project timelines and availability of IT networking training equipment and space at some locations.

WOMENS' ENROLLMENT

Closely linked to the paucity of female IT instructors is the enrolment of women students in the certification courses, and the overall low representation of women in technical/ engineering coursework in KP. This is not unique to Pakistan, it is a global phenomenon – however in KP, cultural and social constraints add to complications resulting in lower representation of women in technical disciplines. As a result, while IT Essentials training turned out to be popular for young women, the project struggled to ensure enrollment and retention of young women in the the CCNA-RS and Security courses. This was not necessarily due to the difficulty of the coursework, a lack of interest on the part of the young women, or issues with aptitude – it mostly stemmed from the fact that even established universities in districts outside of Peshawar generally have low enrolment figures (for women) in IT/engineering departments. Secondly, it is challenging overall (for women and men) to complete the internationally rigorous CCNA courses, and for women, with limited prospects for jobs in their area, the motivation for being CCNA-certified is far lower.

However, because the project offered scholarships to motivate girls to enroll in Cisco trainings overall SYP was successful in ensuring that seven women's institutions participated in SYP (against a projected target of 5), and in exceeding its women's enrolment targets (targeted 600 women; enrolled 686). However, much more substantive work remains to be done – particularly in the transitions between enrolment, certification, and employment – where women students and graduates face unique barriers.

INSTRUCTOR PERCEPTION AND MOTIVATION

While a few motivated instructors went above and beyond their targets to train students, the majority of instructors lacked the motivation to properly impart the courses in the spirit which was required. Moreover, the instructors were not inclined to offer support in terms of employability or life skills. Typically, instructors preferred to continue with their traditional teaching methods and/or placed high expectations on the project to offer them higher remuneration for student training, to augment the salary they received from their institution. Most instructors viewed SYP and the Cisco-certification as a 'stand-alone' 'add-on' activity – that over-burdened their normal course load. Hence, they expected the project to pay them more than what the government offered, in lieu of what they considered as 'additional classes'. The project did pay them a per-student honorarium, based on the student's successful completion of the training. However, the perception of globally certified courses being unnecessary or burdensome needs to be tackled in subsequent projects – and ideally needs strong Government endorsement to help instructors see such courses as integrated within their ongoing curriculum, if not more beneficial to students.

ACADEMIA AND INDUSTRY DICHOTOMY

Despite the government reforms over the past years to revise curriculum and upgrade facilities, the universities, colleges and TEVTAs continue to offer courses that are not relevant to the local market and industry needs. The few KP institutions that offer internationally accredited IT courses have not yet been successful in attracting employers to offer placements to graduating students, mainly because employers remain unhappy with the level and relevance of employability skills possessed by graduates. The gap between academia and industry in Pakistan in general is wide – and in KP it is further challenged by misperceptions, lack of information access (on the part of students and employers), and lack of coherent government policies that incentivize greater local employment and place a premium on professional certification and international-level skills standardization. Working closely with select heads and trained instructors, SYP successfully motivated partner institutions to offer several rounds of the IT Essentials and CCNA trainings. SYP also brought in employers to interview trainees at a project supported job fair. However, these project-level activities need to be standardized for routine, annual or bi-annual implementation by the academic institutions and through support from institutional/government/employer budgets rather than ad-hoc donor funds.

LESSONS LEARNED AND RECOMMENDATIONS

1 PARTNER INSTITUTION SELECTION

An institution's willingness and full participation is critical to the success of such a project. Without the buy-in of the head/dean it is difficult to ensure required resources including getting instructors to commit to the instructional time and the required student follow-up. Given the short project duration combined with the amount of time taken to obtain the requisite NOCs, the selection of institutions was done more on the basis of secure premises, enrolment figures, and available internet access – depth of interest and willingness were much harder to gauge. In a subsequent project, and timelines permitting, a competitive process for institutional selection might afford a better measure of commitment. If the heads and instructors at the institutions want the program, and see their selection as a mark of prestige, then it is likely that they will be more motivated to find solutions to secure their premises, stimulate enrolment and update their schedules (with the appropriate capacity building support provided by the project).

2 INSTRUCTOR SELECTION AND RETENTION

Instructors are critical to project success. Their willingness to fully participate, their understanding of their responsibilities to both their students as well as to the project are important to assess upfront. While several of the instructors were qualified, they were unwilling to train students in these courses outside of their existing workload – despite incentives. Again, if institutional selection is competitive, it is hoped that instructors will be motivated by the heads of their institutions. Similarly, the heads of the institutions might be able to work with the instructor and the project team to devise alternative teaching schedules and to better disperse the workload so that instructors selected for participation in project-proposed trainings are both incentivized, recognized, and afforded a manageable work load. In addition, prior to finalizing instructors for participation in project activities and during the instructor training process itself – it will be important for a follow-on project to ensure that instructors have complete visibility and awareness of their overall responsibilities – possibly by interacting with peers who have successfully completed the program as well as with the project team. Finally, while this was not feasible during the pilot timeframe, a subsequent project could create deliberate, periodic (annual or six-monthly) opportunities for instructors to interact with their peers for networking, exchanges, and ongoing professional recognition by HEC, TVET, GoKP, private sector partners, as well as the donor (through success stories). Such approaches can serve to highlight the importance of their engagement with the project, raise awareness amongst other instructors, and allow for non-monetary incentives/ recognition to further bolster instructor retention, motivation and recruitment (for additional cohorts).

3 INSTRUCTOR TRAINING AND LIFE SKILLS (MOTIVATIONAL & MENTORSHIP)

Instructor training under the pilot was entirely focused on IT inputs. Over 24 days, instructors were provided with a hands-on, project-based learning experience so that they could not only brush-up on their skills but also observe and explore the different teaching methods that they were expected to emulate. However, what the training did not include was life skills content which was crucial. In particular, motivating students to stay the course, mentoring students on job seeking and placement opportunities, and reaching out to parents and families to ensure that students were supported not only in completing the coursework, but also appearing for certifications, preparing for interviews, and following-through on leads and offers.

4 INSTRUCTOR AND STUDENT CERTIFICATION

The SYP budget did not initially include the cost of instructor certification (Cisco provided a discount of 70% (on the total cost of \$325) on CCNA-RS and another 70% on CCNA Security exams (on the total cost of \$250) . Feedback from government stakeholders, in particular the KP-IT Board, required SYP to support the remaining amount and to have instructors take exams. After conducting a survey, SYP identified 17 instructors who demonstrated a willingness to appear in the exam. However, only eight passed the international certification requirements. As a lesson learned, it will be vital to keep sufficient budget to support not only the exam fee for instructors, but possibly also a re-take fee and to prepare instructors for the international certification. In addition, recognition of certified instructors (or a mandate for instructors to be certified) needs to be coordinated with government stakeholders so that instructors aspire to certification.

Similarly, for students, Cisco provided a discount of 61% (against a total cost of \$325) on CCNA-RS and a discount of 50% on CCNA Security exams (out of a total cost of \$250). Government stakeholders were keen to have students also certified at an international level, which was cost-prohibitive for SYP's pilot budget. There was a lack of systemic certification requirements from employers – certain employers demanded certified students, others were willing to take on non-certified students who had a

'completion certificate' from the Cisco Networking Academy (to reflect their achievements in good standing), which meant that few students were motivated to pay for their exams. In a subsequent follow-on, Cisco will need to play a more integral role in increasing awareness amongst potential employers about the difference between its program completion certificates and the international exams – and the value of the international certifications. In addition, a follow-on project should consider budgeting for international certification for students as well (perhaps for the top 50%), and can work closely with the KP-IT Board and other government stakeholders/universities to establish scholarships or access to loans for students who wish to sit for the exams or re-take them. Given the difficulty of the international certification, it is realistic to expect that most students may have to take the exam at least twice before they achieve sufficient marks to meet the certification criteria. Finally, a follow-on project should work with employers and the KP-IT Board to raise demand and supports for certification. For example, as is common in other fields (such as law or accounting) an employer can offer certification 'scholarships' to high-performing employees who have worked for six months or a year, to ensure that a greater number of their hires achieve international certification. A subsequent project can work with employers to track such student hires and extend the discount to the employer, provided that the student sits for their exam within the project period.

5 STUDENT SELECTION/ TRACKING

a.

Student selection is directly related to employment. In SYP, most of the participating students were studying in their second or third year of a four-year degree (Masters or Bachelors as they completed their Cisco coursework,) so still a while away from graduation. Therefore, there was little possibility to work with these students on job placement. In a subsequent project, enrolled students will need to be nearer to the end of their degrees/ graduation so that a sufficient number of them are eligible for employment. This may also prove challenging to mitigate, as students in their final year or final three semesters often have a heavy course load and may need greater motivation to enroll in additional courses. Therefore, ideally, the project duration would be long enough to permit the enrolment of students in their second and third years, with sufficient time for them to graduate, be employed, and be tracked.

c.

Institutions have different schedules depending on whether they are in the North or Southern zones of KP province. Different semester timings mean different examination schedules, etc. It is important to sync project offered trainings with these schedules. While this was not possible during the short pilot phase, it will be more feasible in a project of longer duration.

6 LIFE SKILLS / EMPLOYABILITY SKILLS TRAINING

One of the biggest lessons learned was the extent to which students' lacked life skills/employability skills. For instance, the majority of SYP students did not have the skill to tailor their CVs for specific jobs. In addition, their interviewing and presentation skills were poor (students displayed poor knowledge and little practice on how to respond to 'case study' or 'behavioural' questions around being a team player, responding to conflicts, or organizing their workload). students were unable to demonstrate appropriate communication and language skills (even though they possessed sufficient technical expertise), and at times, they had to be groomed how to present themselves at interviews and the importance of showing up on time. The project had insufficient time to prepare students on all these facets. In a follow-on, employability skills training inputs would need to start much earlier in the training cycle and possibly continue even after the IT coursework has been completed, using hands-on, experiential approaches.



b.

Alignment of IT skills with a student's core degree program is essential. Unless students are enrolled in engineering, computer science or related disciplines, they may not be inclined towards a Cisco certification/course. Typically, basic IT skills are not substantial enough to give a candidate an edge in the job market. Subsequent projects will need to look more carefully at each student's overall degree program and work closely with the university/TVET institution to ensure that they enroll in the appropriate IT certification course.

d.

Follow-up and tracking of students is critical for the project – especially when tracing job placement. Since the pilot time frame was such that student training continued till the very end, it was impossible to track a large number of students' post training. With a project of longer duration, the team will be able to better track students and generate overall better placement results. Often also, given employer needs and the recruitment cycle, there can be a lag of 4-6 months post-graduation before a student might find employment. In a subsequent project, it may be advantageous to establish linkages with job portals or to work with the alumni departments of the institutions more closely, to allow for more sustained tracking of graduates.

7 STUDENT PERSPECTIVE OF JOB MARKET

Students are generally unaware of the state of the job market in Pakistan, regionally, or globally. Most students were not prepared to go beyond 20km for internships or jobs. For example, SYP scheduled interviews with an Internet Service Provider in Lahore, and the interviewees refused to leave Peshawar despite the fact that they would have been awarded a paid internship or a job in a large corporation in a cosmopolitan city. In other instances, students expected high remuneration simply to relocate, or were unwilling to accept unpaid internships (despite the fact that it could lead to a permanent job). While in certain cases, there may have been extenuating circumstances, in most it appeared that this reluctance was largely

attributable to a lack of understanding and preparedness about employment and employment opportunities. In addition, students have little understanding of the IT industry's requirements and needs, and are therefore unable to align themselves with potential jobs. For instance, students studying programming are uninterested in networking courses, demonstrating a lack of understanding about the use of software and programming in networking infrastructure/ networking protocols. Ideally, there should be greater emphasis on exposure opportunities for students, through interactions with managers and leaders working in the IT industry, who could counsel them about upcoming jobs, trends, and needs.

8 INSTITUTIONAL INFRASTRUCTURE

High-speed internet access remains a major problem in many institutions located in southern and northern districts. Similarly, the availability of computer labs for skills-based trainings is insufficient; labs were not available for students to study from Cisco Online Learning Cloud (Net Space). With sufficient time, a follow-on project can work with the government to inform them about these discrepancies and to ensure that all institutions are appropriately equipped, as per Government guidelines and existing public sector agreements with connectivity providers.

9 LACK OF COMPETITION

Students have little motivation to improve their technical skills and do not understand the need for certifications as a way of making themselves career-ready. Instructors, too, lack awareness of the importance of the practical courses offered by Cisco beyond a 'short-course' option. To counter this, in a follow-on activity, more emphasis on the wider applicability of such trainings and the relevance of certifications can be provided, both during the courses themselves as well as during the life skills sessions.

10

MISSING ENTREPRENEURSHIP MODEL

In the pilot, there was little scope for introducing a hands-on entrepreneurship model – that would utilize the skill sets offered in the IT Essentials coursework. As a result, the focus of the project was on medium and large organizations where network infrastructure, design, and troubleshooting skills would be in demand – but where jobs are scarcer. Including freelancing/entrepreneurship options could also help a follow-on activity be more gender balanced in its enrolment outreach.

12

LACK OF GOVERNMENT SUPPORT FOR EMPLOYMENT

Government support and active endorsement can play a major role in engaging private sector employers. In a subsequent project, more effort needs to be made to align with government projects and contracts and to benefit from the IT and development plans put forward by the KP IT-Board and the Board of Investment overall. Also, universities' Offices of Research, Innovation and Commercialization (ORICs) need focused government intervention, oversight, and support in activating ORICs to be more engaged in helping connect students with employers.

11

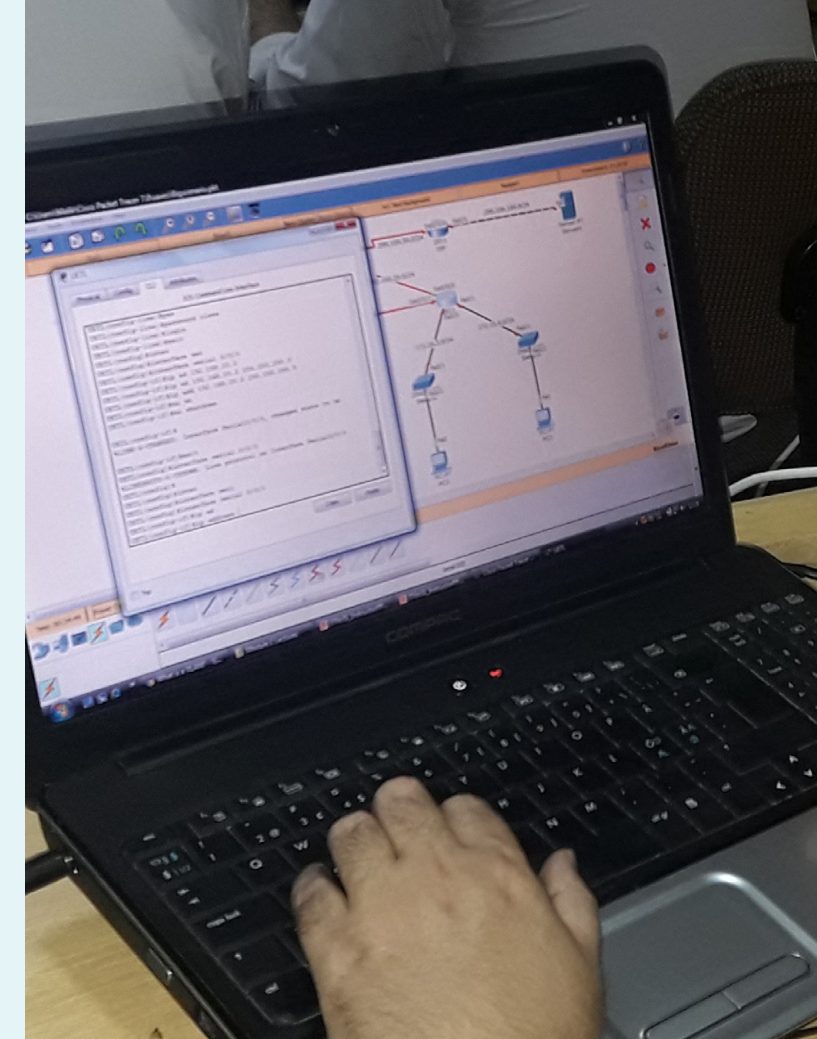
NON PARTNER INSTITUTE STUDENTS

SYP's focus was on working with Government institutions, although the project received many queries from private institutions who demonstrated greater interest and resources for offering similar courses. Government institutions were reluctant to permit students from external institutions to attend courses on their campuses (in part because of concerns around infrastructure safety and security, but largely because no such public-private model exists). As SYP could not offer labs to private institutes (other than a handful of early partners), it was not possible for the project team to accommodate students from non-partner trainings who were interested in taking courses. A subsequent project should look to establish additional Academy Support Centers (ASCs) at qualified government institutions and creating 'hubs' where students from the surrounding areas/private institutions can also benefit from the ASC lab infrastructure. This will allow for ASC sustainability, and also boost the overall numbers of students served by public-sector institutions – particularly for more specialized courses such as CCNA.

13

OVERALL DESIGN FACTORS

Separately, a few, key design factors should also be considered under the 'lessons learned' section. The SYP pilot project timeline and ambitious targets were conceived with the deliberate aim of balancing a one-to-one match, as required by the Global GDA framework. However, in retrospect, this resulted in the project sprinting to establish 40 centers in a 22 month time frame (16 months, post-NOC). The outcome, as recognized at the onset, was that SYP would have to apply a far 'lighter-touch' than was truly necessary – and that its focus would be on quantity rather than quality (both in terms of institutional partners and student enrolment). The project team was similarly strapped on human resources – despite knowing that more supports were needed for instructor follow-up, that stronger M&E was necessary to track students and research critical success factors (particularly around employment and gender), or that more senior staff supports were required to ensure results vis-à-vis student/employer engagement linkages – SYP was unable to take corrective measures given the limitations of the mechanism under which it was funded. Although the traditional GDA framework on its own does not offer much flexibility, subsequent projects should plan a more realistic number of targets in coordination with GoKP and USAID, and the Mission should look to explore



a combination of funding streams that perhaps combines a 'locked-in' amount under a GDA (to ensure the one-to-one private sector contribution), with a second non-GDA source that offers flexibility for services and activities necessary for impact (such as life skills, parent outreach, entrepreneurship), but where a private sector/IT-corporate partner will be unable to contribute. By combining funding streams, the Mission ensures private sector contribution in targeted ways while not compromising on quality – and in the longer run it is the quality of the trainees, the quality of the employers' experiences with their first set of graduate recruits, and the quality of the relationships fostered between government, private sector, academic institutions' and instructors' that will ensure longevity and scale.

Finally, while World Learning and Cisco CSR teams enjoyed a solid and highly productive partnership – greater Mission and GoKP engagement was needed to bring in Cisco's in-country leadership for support – especially around employment – through access to Cisco customers, other CEOs, and other firms in the IT sector. In a subsequent project, particularly with high-profile, international corporates Mission-Director/ Ambassador-level/Minister-level person-to-person connections (led by USAID/GoKP) will be important to foster so that there is long-term ownership from each corporate sector partner, extending support beyond CSR.

SCALE-UP STRATEGIES

The SYP pilot was rich in the multiple types of learnings it offered to the project team, and in the information it yielded about the kinds of issues that institutions, students, families, employers, and government stakeholders are grappling with. The interplay of these complex factors requires greater ethnographic research, as well as time to experiment with micro-adjustments and customization – for better tailoring to geographical location, gender, and both student and institutional capacities. As such, when proposing a ‘scale-up strategy’ – the SYP team would like to suggest a carefully considered expansion in terms of the depth of services – for greater impact on students and student employment more directly, as well as a broader geographic and institutional reach – so that targeted stakeholders and organizations can be selectively brought together with the underlying aim of ensuring program sustainability together. In this section, we present two such approaches that can be effectively combined during program design and field implementation to yield a holistic, viable model for IT-related skills development and employment.

A. SCALE-UP STRATEGY 1: ENHANCING THE DEPTH OF SERVICES OFFERED TO STUDENTS

Perhaps the greatest strength of SYP’s initial design is that it was predicated on two positive growth trends. Firstly, IT skillsets are indeed in great demand throughout Pakistan – regardless of gender. Secondly, acquiring IT skills is considered highly acceptable socially and academically -- for both women and men. These two aspects offer terrific leverage for any project seeking to boost youth employment. IT skills allow for entry into a wide variety of industries – ranging from academia to biotechnology, construction, sports, security, manufacturing and agriculture. Even a basic level of user proficiency with common IT applications (such as Adobe or MS Office suites) enhances an applicant’s competitiveness to vie for entry-level positions in their own localities as well as in other areas. More sophisticated or motivated students can also use their IT skills to continue to educate and upgrade their learning by accessing the plethora of information and supports available online, provided they have adequate access to bandwidth at schools, universities, or (in more limited instances) within their homes or communities.

However, like all technical skills, becoming proficient in IT requires hands-on practice. Our experience with SYP clearly demonstrated how, despite years of reform efforts, the majority of public sector institutions and instructors still adhere to a lecture-based, theory-focused approach – even to IT. And how this is proving detrimental to the students enrolled at these institutions. The collaboration with Cisco and Cisco’s Networking Academies Program under SYP, was perhaps the first opportunity for many of our students in KP to access internationally levelled, real-time curricula (consistent across over 100 countries with 8 million trainees). It was also the first time that students, and their instructors, were challenged to learn and test their knowledge using a hands-on course with simulation tools and hardware that allowed for building confidence through consistent, practical experience. For some, it was a life-changing experience and has led not only to jobs but to a self-assurance and resilience that has impacted their standing in their families and communities as well. In a subsequent project, with a

focus on larger scale, greater emphasis needs to be placed on researching and identifying the causes for such ‘tipping points’ -- so that they can be replicated and augmented for maximum impact. As any good pilot, the end of SYP leaves us still with many unanswered questions, in addition to new insights. For instance: What causes an instructor to stay on to teach a course after mandated hours and how can such instructors become role models for others? What factors come into play when a young female engineer is empowered to take a course and how can she be retained not only till the end of the course, but also for successful certification? What supports need to be made available to students who wish to seek jobs outside of their district or provincial markets? In a scale-up project, in-depth interviews and feedback from students, employers, key family members, institutional heads, and instructors will be invaluable to ascertain the critical factors that SYP has anecdotally uncovered – but that remain to be systematically studied for their replication potential.

One of the more obvious learnings from SYP was that for scale-up in a subsequent project, there needs to be a broader roster of course choices and a larger pool of private partners. In SYP, we were limited to offering only IT Essentials, CCNA/Routing-Switching, and CCNA Security as course options. While important, especially for higher-paying jobs, CCNA-RS and Security are still in limited demand – given the overall size of the sectors in which these skills are applied, within Pakistan (i.e., in the medium and large-scale IT organizations, Telecommunication sector and banks). Over the course of implementing SYP, we learned that general IT-skills – such as IT Essentials, Microsoft Office Suite, programming languages, and other user-experience tools for graphics, design, CAD/CAM, business management etc., are in much greater demand and that there are a wider variety of jobs into which students can be placed with less ‘specialization’ than required for a Cisco-Certified Network Engineer. Although there is an obvious difference in starting-wages for a CCNA versus someone with MS Office skills, the likelihood of finding a job nearer to their preferred locale is somewhat greater for students with the latter skillset. At this point, the timeline for job placement – whether for specialized skills or general skills – seems the same and hinges more on a) access of employers to graduating students; b) employer’s perceptions of the quality of specific institutions, and c) institutional relationships between employers and universities/TVETs, than other factors.

¹ Examples of innovation centers establishing hubs in second and third-tier cities – away from urban centers now exist in Punjab and are also being tested by Karandaz, so a new project would not need to re-create the model – but adapt it for use in KP/FATA. Also, the services, mentoring and training that incubators and accelerators offer can strongly complement the life skills activities that a short-term project will be able to provide and, given the combination of equity investment/public and private sector funding streams available to the incubators/accelerators, will be more sustainable. Similarly, the project might be able to closely monitor and bolster the overall quality of the types of trainings available within the incubator/accelerator serving as a hub – resulting in an overall improved set of services for students and employers.

In addition, any subsequent project/scale-up strategy needs to place a greater, almost obligatory, emphasis on ‘techno-entrepreneurship’ and internships/apprenticeships alongside end jobs. Often, students enrolling in the certification courses were mid-stream in their academic cycle; due to scheduling restrictions, students were taking on the short-courses as and when the courses were being offered and were not necessarily poised to graduate for another 3-4 semesters. Indeed, the bulk of SYP students will graduate post-project. Not only should a subsequent project be longer in duration to be better able to support and track graduating students, but ideally (and perhaps seemingly contrary to project deliverables), students in their first or second year should be encouraged to take on the certification courses. This will permit them greater opportunities to practice, refine, and build on their skill sets through well-structured internship/techno-entrepreneurship/project-demonstration models where they might design a website, create an application, design brochures/logos for local businesses or support IT-security services – thereby gaining exposure to the world of work while also building a carefully curated portfolio (for demonstration to potential employers or clients), while simultaneously attaining critical employability skills through repeated practice. A four to five year project with carefully phased employment targets, will be better suited to straddle the needs of immediately graduating students, while gradually producing subsequent cohorts of students with more balanced expertise (i.e., a combination of IT and soft-skills) leading to higher rates of employment and entrepreneurship. Meaningful internships and apprenticeships are difficult to get started – and will likely require the project to provide scaffolding to interested employers towards establishing an internship/apprenticeship program. However, it is well worth the long-term investment – and over time, successful internship models can be replicated through industry associations and chambers of commerce etc. Similarly, it is worth a project’s time to invest in a built-in ‘techno-entrepreneurship’ component – or in linkages with existing public and private sector “innovation centers and accelerators” and extending the outreach from Peshawar into the districts. Making it mandatory for students to put their skills to use (even in a voluntary capacity) so that students and instructors are motivated to apply IT solutions to real-world problems and establish a portfolio that allows for demonstration of not only IT skills but work readiness as well. The site/web-based portal could also offer a centralized list of trained/certified graduates (with links to individual institutions), CVs of potential students (with links to Cisco’s global database), and offer employers opportunities to short-list and connect with trainees for ongoing interviews or internship opportunities. During the project’s implementation, and as the overall per-student costs will be low, it will be feasible to collectively identify the sustainability of such services using a combination of student/employer subscription/usage fees and government/institutional supports.

No discussion on employment opportunities can be complete without critical consideration of overall student readiness for employment, as well. In the pilot effort, there was insufficient time to adequately support students in acquiring critical skills needed for successful job acquisition and retention. SYP was only able to offer 8-12 hours of instruction on the very basics – CV preparation, interviewing, grooming, and communication and presentation skills. Students need much more exposure, and more importantly, practice, in these areas but also in areas that cover problem-solving, critical thinking, motivation, time management, goal-setting, gender sensitization and more broadly on career trajectories, options, and preparation for job placement. This cannot be achieved in a short timeframe, nor can it be dealt with as an 'after thought' or post-course work. These skills need to be integrated within a student's overall academic cycle and ideally addressed repeatedly and frequently within each semester and in parallel, at least within each IT-skills course. Integrating such instruction, in turn, requires a longer duration for each overall course – which was not feasible given the SYP project timeline. It also requires an instructor who is not only trained in imparting such skills but who also brings industry know-how. Since this is unlikely given the background and experiences of most of the IT instructors at public sector institutions, ensuring that students gain these critical 'soft-skills' needs to be a responsibility shared by the institution's head, by the staff within the ORICs (or equivalent employer-liaison appointee at each institution) and/or a specialized group of facilitators/counsellors who visit the students at frequent intervals to provide more in-depth exposure and hands-on practice. Adding in visits from employers, industry leaders, alumni students who are currently employed, and other role models can help augment students' awareness of the job market and industry requirements. This is particularly relevant for young women, who must contend with social and geographical barriers and whose opportunities for exposure to current practices in the industry are more severely curtailed. Finally, the SYP experience helped bring to light that students' families play a critical role in how narrow or broad a graduate's horizons might be; parents and community leaders need access and

exposure to trends in employment, and need to be scaffolded in understanding how best they might support aspiring job seekers from within their families. Given a project's unique positioning as a broker between multiple stakeholders, institutions and youth – a subsequent initiative should include outreach to parents and families at least at the beginning of each semester conducted via institution heads/instructors/counsellors, and follow-up through SMS or print updates should be conducted as well. It is important that the focus is not on the project as the purveyor of information, but rather on establishing a multiplicity of channels for accurate and timely information access and dissemination so that parents and young people are independently empowered to diversify their own academic and employment opportunities.

Separately, given restrictions on the mobility of young women graduates, a scale-up activity should focus on linkages with e-working platforms that would allow more young women to participate in economic activities. Free-lancing work in web-design, programming, or graphics design can be made accessible to more young women graduates – even as they are still completing their coursework – so that they can gain experience of navigating such opportunities and establish a portfolio of their work prior to graduation. In addition, a scale-up activity should look to bringing employers from certain IT industries where home-based work may be more permissible to interview young women graduates for outsourcing work -- such as app development companies, local start-ups, graphics and multimedia design, gaming or animation work conducted in Pakistan for foreign corporates, telemarketing, tele-health etc. Finally, during the parent/community outreach activities, greater emphasis can be placed on gender-specific issues – to ensure that the project is better informed of parent/family concerns so that collective responses and solutions can be identified. Also, the project can act as a conduit to information that can help families and young women empower themselves to be more aware of their rights as employees and about the initiatives that both the public and private sector have in place to increase women's employment overall.

B. SCALE-UP STRATEGY 2: SELECTIVE GEOGRAPHIC AND INSTITUTIONAL EXPANSION

The second aspect of our proposed scale-up strategy includes the expansion of activities into select districts, and integration with select public and private sector institutions. For instance, a future project should look at selecting districts where there is a larger potential for workforce absorption; in KP this would include expanding coverage in areas such as Abbotabad, Haripur, Manshera, Swabi, Hazara and Mardan. Similarly, a follow-on project should select specific agencies in FATA – and focus on greater depth of coverage rather than spreading out to districts where the likelihood of jobs might be scarcer. Greater collaboration with the GoKP to obtain better calibrated data on employment and university/GCET/TVET enrolment trends will also help identify students from locations where mobility is less of an obstacle. For example, recent developments in teacher appointments at the UC and district levels clearly reveal certain locations from where women and men are more willing to travel and preferred locations for postings. In parallel, data from online job posting sites – such as Rozee.com and from select KP-based employers can be aggregated to further discern multiple trends relevant to education, socio-economic class, and mobility. While such data are at best a proxy, using a wide variety of data to drive at least the initial re-prioritization of districts and institutions may help with improving student enrolment, certification, and job-placement downstream. Moreover, the data will help reveal institutional and district 'hubs' – where a follow-on project can focus on establishing Academy Support Centres that can grow to provide both soft-skills services as well as a wider selection of coursework. While the SYP timeline required the team to 'dive in' and begin working with institutions on procurement and training, a more calibrated approach to institutional selection is critical for scale-up. In addition to selecting institutions and hubs as

described above, it will be important for a subsequent project to ensure that the leaders at the selected institutions as well as the instructors selected for participation are engaged, motivated, and possess the leadership skills to be true 'champions'. To this end, a follow-on project needs to make provisions for a set of professional development activities that center on networking and exchange among institutional heads/Vice Chancellors/Deans/instructors, and on raising the profile of these individuals directly with key government stakeholders. The activities in themselves, do not need to be extensive or expensive, but they do need to combine exposure to employers and market trends in IT, opportunities for common problem-solving, alongside elements of positive competitiveness and recognition of achievements. Given successful examples from the SYP pilot, more institutional leaders should be encouraged to find creative ways to integrate certification coursework contents within the regular BS, MS, or other engineering coursework. Universities and TVETs can also find ways to offer summer courses (in both IT and soft-skills) to students already enrolled, or new students within their catchment areas (the latter can also be a potential revenue scheme, depending on the geographical location). Institutions with greater numbers of 'certified' graduates can be recognized by GoKP and their profiles can be raised with parents, community members, and potential employers through the project's outreach efforts but also in tandem with GoKP IT-Board and other government initiatives around investment and large-scale projects. Finally, institutional heads and instructors can be supported in establishing simple alumni follow-up protocols and internship/apprenticeship frameworks – so that they are able to create a sustainable 'feedback and tracking mechanism' for ongoing employment opportunities for new cohorts of students and graduates.

Another aspect on the institutional side required for scale-up, is support from the GoKP for financial remuneration for instructors. While a project can augment instructor salaries based on the successful completion of student trainings/certification – over the longer-term, this is neither desirable nor sustainable. For instructors to routinely offer such instruction, it is better if the GoKP were to set aside funds using evidence-based mechanisms designed collaboratively with project advisors and institutional heads. In parallel, GoKP will also need to set aside funds for scholarships/student certification – to defray costs to students even after private-partner discounts. While Cisco offered a substantial reduction in its fees, certification remains cost-prohibitive for the majority of students in the areas in which the project (and USAID) seek to serve. To this end, SYP has already engaged with GoKP stakeholders around the formalization of a PC-I under the new Annual Development Plan (ADP), and progress on the same appears promising within the timeframe of a subsequent project.

In a similar vein, GoKP and institutions need to establish guidelines for job fairs – and to institutionalize the responsibility for the same accordingly. While it is neither feasible nor necessary for individual institutions to bear the burden of career fair costs independently, the larger (or hub) institutions in each district should be required to host employment linkages activities and, possibly, annual career fairs which seek to link employers from the districts, province and elsewhere in Pakistan to graduating students. Again, although a project may catalyze this process and help establish initial guidelines for quality (i.e., standards of employer outreach and student follow-up), longer-term budgeting and accountability of such activities – especially the employment results generated -- needs to reside with GoKP and the public sector academic/TVET institutes that the government supports. In addition, given the GoKP IT Board's emphasis on digiskills and employment, there needs to be greater alignment overall so that gains in employment and youth outreach are not limited to the duration of donor-supported projects.

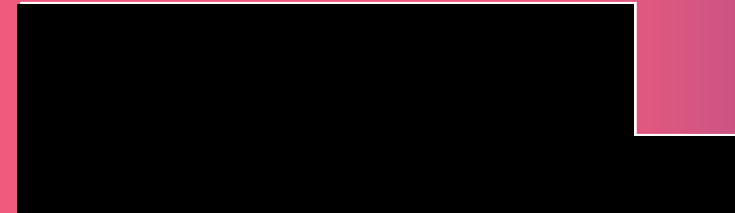
In addition, greater collaboration with the GoKP and other donors/partners working in the vocational skills sector (e.g., GIZ, UN-Women, USAID, Karandaz etc.) is necessary to ensure a minimum standardization around career counseling and employability skills trainings. As per the World Economic Forum report of 2017, employers routinely identify

'learnability' – an individual's willingness, enthusiasm, and growth capacity to acquire new skills as critical. In addition, basic skills around interviewing, grooming, communication, presentation, negotiation, timeliness, overall work place readiness, gender sensitization, employee/employer rights, and English/Urdu language skills (appropriate for the work place) should be provided across the board – and not just within the context of donor-supported projects. Imparting such skills requires hands-on, project-based experiences for students – but can also be mediated by emerging technologies (such as augmented reality apps, simulations, role-playing games etc.) that should be designed and disseminated in collaboration with Pakistani start-ups and Pakistani employers. Ideally, the time spent in acquiring such skills should be equal to the time invested in hard-skills, and the use of technology-mediated solutions will ensure broad scale and outreach to students at all levels and in various geographic locations. More importantly, by offering students a blended-approach to learning and practicing employability skills, institutions will be further helping their trainees/graduates become active learners. A blended and technology-driven approach will ensure that students are able to access a minimum standard quality of instruction – that does not solely rely on the skillset of the instructors in their local institutions (many of whom have little industry exposure/experience, or who will need significant investment in upskilling themselves to grow comfortable with the role of counselor, mentor, or coach).

Lastly, if project funds permit, it would be helpful to provide GoKP leadership, and the 'champions' at select institutions with an 'exposure' visit where they can interact with other international government officials and instructors who have successfully scaled-up public-private sector partnerships in IT or who offer innovative models for youth skills training and employment. Globally, there is much work that is being done in this arena, and being able to see good models 'in action' can often be invaluable in spurring leaders to initiate change within their domains. In order to be meaningful, any such visit will need careful planning – for pre and post activities and significant follow-up, along with clear, specific indicators as to the types of changes and commitments that should result. If conducted early on in the project's timeframe, this can be a powerful way of impacting overall sustainability for a scale-up intervention.

“Thanks to the USAID funded project SYP – I was able to pursue my certification in Networking (CCNA). In addition to technical, SYP groomed us on interpersonal and soft skills. This combination gave me a competitive advantage over other candidates during my interviews with NAYATEL and now I work for one of the most sought after organizations in the sector.”

- Majid Hussain,
Trainee Network Support
Engineer, NAYATEL



[Redacted text block]

[Redacted text block]

[Redacted text block]

[Redacted text block]



[Redacted]	[Redacted]		[Redacted]	
	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]

