

AN INITIATIVE OF THE INTERNATIONAL YOUTH FOUNDATION

A Social Return on Investment (SROI) Study

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Executive Summary

The International Youth Foundation (IYF) is a non-profit organization dedicated to helping the youth shape their futures through well-established life skills programs. One of these programs includes the Passport to Success program (PTS), which operates within Mexico's Technical and Vocational Education and Training (TVET) institutions to provide knowledge and skills for employment. Through this pro bono consulting project, the George Washington University (GWU) research team sought to help IYF expand its ability to articulate the importance of its work to regional, national and global stakeholders and describe the PTS's impact beyond the direct effects of the people they reach and serve. The final product is a predictive model that extrapolates the current and future impact of PTS programs on their stakeholders based on the school-based implementation in Mexico.

The GWU team used the Social Return on Investment (SROI) methodology to create the model by assessing the impact and identifying the monetary value of the outcomes and then comparing this with the cost incurred within the program. It takes six stages to complete the SROI analysis: 1) establishing scope and identifying stakeholders, 2) mapping outcomes, 3) evidencing outcomes & giving them a value, 4) establishing impact, 5) calculating SROI, and lastly, 6) reporting. The result is an estimate of the value created for every dollar invested in the PTS program.

Findings from the SROI analysis showed that the PTS produces positive benefits for students, schools, and communities in Mexico. The SROI ratio for the PTS program in Mexico over five years is 7.17: 1.00. For every \$1 invested in the PTS, there is a \$7.17 gain in benefits to stakeholders over five years. In other words, this program generates more than seven times the amount of value that it costs. This ratio is contingent on a couple of limitations, including the fact that the qualitative and quantitative data collected during the research was a convenience sample, which could have skewed the results. Additionally, researchers chose some of the financial proxies for the outcomes subjectively.

The GWU research team recommends three areas for future research, including; 1) replicating this process for IYF's PTS program in South Africa, 2) adding additional stakeholders to the model, and 3) refining the cost associated with PTS.

Project Rationale

The International Youth Foundation (IYF) is a non-profit organization dedicated to helping youth aged 15-29 shape their futures through well-established life skills programs. These programs include the Passport to Success program (PTS), which ties education to work and boosts participants' potential and performance in school. IYF has been leading several regional projects in Mexico for fourteen years and South Africa for seven years. They have regional influence in the education sector, primarily in upper secondary and Technical and Vocational Education and Training (TVET) institutions, which provide knowledge and skills for employment. IYF also influences national-level business groups and government. However, IYF wants to expand its ability to articulate the importance of its work to regional, national and global stakeholders and describe its impact beyond the direct effects of the people they reach and serve.

IYF has requested the GWU capstone team to design a predictive model that could extrapolate the current and future impact of PTS programs on their stakeholders based on the school-based implementation in Mexico. To achieve these goals, the GWU team used the Social Return on Investment (SROI) methodology to assess the impact and identify the monetary value of the outcomes and then compared this with the cost incurred within the program. The SROI method has estimated the value created for every dollar invested in the PTS program. We also estimated the future impact of the PTS program in Mexico after five years and reflected on the Mexican project's applicability in South Africa.

Research Questions

The following research questions guided this project.

Evaluation Question 1: What is the monetary impact of the Passport to Success program in Mexico?

- a. What is the monetary value of the program to the students?
- b. What is the monetary value of the program to the schools?
- c. What is the monetary value of the program to the Mexican communities?

Rationale: This is the central question of the evaluation. Evaluation question one and its subsequent sub-questions help with calculating the SROI for the PTS program. Our team and representatives from IYF have identified the important stakeholders from the activity, including the students, school (i.e., teachers and school staff), and the larger Mexican community. By identifying the monetary value of the outcomes for each of the stakeholders (i.e., each sub-question), we could aggregate the total value to answer evaluation question one.

Evaluation Question 2: What is the future impact of the program in Mexico after five years?

Rationale: The SROI from the PTS activity is not limited to one year; however, there is a natural drop-off in impact the further away students get from the program. This evaluation question seeks to identify where that drop-off occurs and help model the total return on investment for multiple years.

Evaluation Question 3: What factors would need to be changed for IYF to calculate it for the South African program?

Rationale: IYF is not only conducting the PTS program in Mexico but also in South Africa. Conducting more than one SROI evaluation is outside of the SOW for this evaluation; however, this evaluation question seeks to detail some of the Mexican model's assumptions and offer details for how the model needs to change in order for it to apply to South Africa.

Background

IYF has partnered with TVET schools in Mexico to equip their students with the necessary socioemotional skills by better aligning the high school curricula and human resource needs of the leading sector in Mexico (Torres & Szenker, 2016). IYF has partnered with 39 technical (TVET) high schools, 3 in the state of Chihuahua and 39 in Mexico, to influence participating students' academic performance and reduce school dropout rates (Torres & Szenker, 2016).

Passport to Success (PTS) is a program/curriculum that includes content and training methodologies for high school teachers (Torres & Szenker, 2016). To implement PTS, IYF equips the participating teachers with learner-focused and interactive teaching methods that "PTS-certified" teachers used to foster students' academic performance and equipped them with the

social and emotional skills essential for their employability. These skills include responsibility, teamwork, self-confidence, and time management (Torres & Szenker, 2016).

In Mexico, IYF has partnered with the Colegio Nacional de Educación Profesional (CONALEP), one of the technical high school education systems (Torres & Szenker, 2016). Through this partnership, IYF has upgraded students' technical skills through the PTS program, including integrating 30 PTS life skills lessons into the CONALEP curricula taught in TVET schools, and has provided career guidance (Torres & Szenker, 2016). The overarching goal of this partnership is to improve the alignment of participating schools' curricula with the human resource needs of leading sectors in Mexico and improve the employability of high school graduates (Torres & Szenker, 2016).

However, in South Africa, IYF has partnered with TVET colleges to provide life skills training packages- aligned with the country's TVET Life Orientation curriculum (Rooth, 2017). The goal of PTS implementation in South Africa is to "equip youth with enhanced life skills to be productive employees and citizens (IYF, n.d.), which is similar but broader than the PTS implementation goals in Mexico. In South Africa, IYF aims to integrate PTS training into the country's TVET curricula by obtaining formal accreditation of the PTS from the Department of Higher Education and Training.

The intent of this capstone project was to help IYF articulate the benefits of the PTS program in monetary terms to all the stakeholders, including students, teachers, parents, community in large, funders, and Mexican educational policymakers. Additionally, this report could help IYF identify the PTS components- lessons that deliver the most and least monetary values to the stakeholders. Finally, this report could offer comparison points that help IYF or third parties conduct similar studies aimed at capturing the monetary values of different PTS components in South Africa.

Literature Review

To understand the school system in Mexico, our team researched the education system and TVET school in Mexico. Additionally, our team considered three methodologies to design a predictive model that would illustrate the future impact of PTS. These are the following three methodologies

our team considered to produce the deliverables (1) Cost-Benefit Analysis, (2) Anticipated Impact Measurement Monitoring, and (3) Social Return on Investment (SROI). The following section provides context on the TVET system in Mexico, reviews the three methodologies, discusses examples of how research studies applied the SROI method, which we used to inform our research methodology decision.

The Mexican government has fostered job skills by implementing policies and programs to deliver TVET systems (Lobo, 2016). Technical and Vocational Education and Training (TVET) systems operate three types of programs, "(1) the "technological baccalaureate," with a three-year plan of study, (2) "training for the workplace," with short-term courses possibly offered in or outside a classroom setting; and (3) "on-the-job training," which may be the principal purpose of the public intervention, or merely a complementary component of programs that have other objectives." The system was developed to (1) boost the human capital of workers and enterprises to enhance their productivity and competitiveness and (2) increase the employability of unemployed groups (Lobo, 2016). For the team to conduct research on TVET systems allowed us to understand why IYF decided to implement the PTS program here and then move forward with reviewing methodologies.

The Cost-Benefit Analysis and Anticipated Impact Measurement Monitoring are two methods of calculating benefits and costs that we considered initially. However, after reviewing the methods, we determined that these methods would not be appropriate or feasible for our project. We present our analysis for each method below.

Cost-Benefit Analysis

A cost-benefit analysis (CBA) considers all of the costs and benefits to society as a whole. This analysis quantifies the value of all consequences of a policy to all members of society in monetary terms. "The purpose of a CBA is to help social decision-making and to increase the social value or to improve allocative efficiency" (Boardman et al., 2018). When performing a CBA, the researcher must consider the net benefits, willingness to pay, and opportunity costs. The net benefits illustrate how implementing the policy will either make people better or worse off. The concept of opportunity cost is used in CBA to place a dollar value on the inputs required to

implement policies. Lastly, the willingness to pay is the amount that each person would be willing to pay to obtain the policy's impacts, taking into account all the changes in the person's consumption (Boardman et al., 2018).

Anticipated Impact Measurement Monitoring

In 2017, the International Financial Corporation (IFC) developed the Anticipated Impact Measurement and Monitoring (AIMM). This system helps investment teams quantify development impact in a measurable format. It expands the standard focus on direct stakeholder effects by including economy-wide effects and systemic effects (IFC, 2021). Besides, the system considers environmental effects. The AIMM system highlights each project's strengths, identifies its risks and weaknesses, provides a rating/score based on anticipated impact, and compares it across the institution's portfolio (IFC, 2019).

The SROI Methodology

Although there is an overlap between SROI and the other methodologies, including sustainability accounting, and financial accounting, their differences stem primarily from the interaction with the stakeholders. This difference is why we chose the methodology. As Nicholls et al. (2009) explain, "Social Return on Investment (SROI) is a framework for measuring and accounting for this much broader concept of value; it seeks to reduce inequality and environmental degradation and improve wellbeing by incorporating social, environmental, and economic costs and benefits." SROI uses monetary values to represent the social, economic, and environmental outcomes. While for SROI, involving stakeholders is its foremost principle, the CBA is based on welfare economics and does not implicitly involve consultation with stakeholders. Sustainability accounting focuses on issues that stakeholders have raised but not on the number of outcomes experienced. Financial accounting also does not require stakeholders' involvement to determine which financial transactions should be part of the study (Nicholls, 2017).

The following four studies show similar projects related to youth intervention programs that used the SROI methodology to estimate the value of social return for every dollar invested into the programs. Based on the studies we reviewed, we found that the SROI methodology involves and depends on stakeholders' perspectives in determining the outcomes that shaped how much social value per dollar (or other currency) the investment creates. While CBA quantifies monetary terms' value, it does not require those affected to decide the outcomes (Nicholls, 2016). The AIMM methodology does include stakeholders but expands to include economy-wide and systemic effects, which can steer focus from the direct stakeholders. Considering the different methodologies and implementation of SROI in other research studies, our team decided to move forward with SROI. The SROI ratio could help IYF describe the benefits of the PTS program to the government or corporate donors and achieve its goals of scaling up the PTS program to the new schools, new regions, and over time.

First, McGrath and Stevens (2017) conducted a study in Australia to forecast the social return on investment of Cirkidz circus-arts training on the mental health of participating children. The key stakeholders in this study were children aged between 8-14 years old. The children were surveyed and participated in focus group interviews before and after six months of participating in the Cirkidz circus. Secondary stakeholders included the Cirkidz general manager, the artistic director, circus trainers, and the children's parents. Together, the stakeholders and researchers developed a theory of change to identify changes (outcomes) and the value of such changes. When calculating the SROI ratio, researchers believed it was necessary to make assumptions and calculated a sensitivity analysis to assess whether those assumptions may influence a final value. The sensitivity analysis included:

- 1. Deadweight, a proportion of an outcome that might have happened without any intervention.
- 2. Attribution, taking account of external factors, or the contribution of others that may have played a part in the changes identified, and
- 3. Displacement, when one outcome is achieved but at the expense of another outcome, or when a stakeholder is adversely affected (McGrath and Stevens, 2017).

The SROI analysis found that Cirkidz Tweens circus training may generate \$7 of social return for every one dollar invested.

Second, a similar case study (Walk et al., 2015) has used SROI methodology to analyze the social impact of social enterprise that offers job and skills programs to unemployed, predominantly female populations in Toronto, Canada. The main stakeholders were program participants, staff,

freelance and full-time instructors, volunteers, and funders. Then the research team identified the indicators for the outcomes, the quantity and duration of the outcomes, and the financial proxies to measure them (Walk et al., 2015). The study used quantitative and qualitative data and estimated an SROI ratio of C\$2.08:C\$, i.e., one Canadian dollar investment yields a social return of just over two Canadian dollars.

Third, on behalf of CAYLUS, the implementing agency, Nous Group (n.d.), carried out a study to capture and quantify the value created by investments in youth programs in remote Central Australia. The study initially identified a tentative list of stakeholders based on the experience of team members. This study also offers tables on various financial proxies used to monetize different outcomes (for instance, they took into account the cost of work readiness courses in Australia to quantify increased employability of youth), which can help our analysis of the PTS program.

Fourth, a study analyzed two fictional youth intervention programs in Minnesota (Anton and Temple, 2007) to quantify each program's values. The researchers compiled a list of perceived or likely benefits produced by the programs. The list compiled included interviews with administrators of several intervention programs. The researchers conducted the interviews to understand better the services provided and the outcomes they produce. Next, the researchers measured the actual costs of the operating programs. Finally, they compared the estimated value of the benefits to the program's costs (Anton and Temple, 2007).

Gaps on Literature Review

The third party-evaluation reports of PTS training in Mexico were in Spanish, and no one in the team understood Spanish; therefore, we used translation resources to comprehend the reports. The GWU team did not receive any third-party evaluation reports of the PTS training in TVET colleges in South Africa. This study did not include non-TVET PTS third-party evaluation reports from IYF to maintain relevance and conciseness.

Methodology

As elaborated in the literature review, SROI is a method that focuses on a stakeholder-driven framework for measuring and accounting for how activities create and destroy value (Nicholls, p.

9). Thus, our team chose SROI as a model for completing this analysis because the methodology closely aligns with IYF's values and beliefs about the PTS Program. Additionally, the SROI methodology was well-established, and there was ample literature and resources available to help guide us through the process. Below are the six essential steps of the SROI methodology that we followed to answer our research questions.

1. Establishing Scope and Identifying Stakeholders

Our team has worked with IYF to establish the scope of this evaluation. Currently, there are four different curriculums that IYF is implementing through the PTS program. One is school-based, one is out-of-school and out-of-work based, and one is online/virtual. Because these programs have slightly different outcomes and or goals, we have limited our scope to explicitly looking at the PTS school-based curriculum implemented in upper secondary public schools in Mexico, especially in TVET institutions.

As for Stakeholders, in conjunction with IYF, our group has identified three stakeholder groups: students, schools, and the Mexican community at large.

2. Mapping Outcomes

Mapping the outcomes was the crucial component of SROI methodology. In this section, we analyzed how the PTS program used specific resources (inputs) to deliver activities (measured as outputs), resulting in outcomes for stakeholders. We collected the information in two phases. First through IYF staff key informant interviews, and later through a quantitative survey distributed to all three stakeholders. After determining the final inputs, outputs, and outcomes, we later calculated the outcomes into a dollar value.

3. Evidencing Outcomes & Giving them a Value.

We took the outcomes discovered in Step 2 and assigned values to each of the outcomes in this stage. We used SROI methodology and past literature to help inform our decision-making for how to value specific outcomes. For example, SROI literature typically values personal growth, such as leadership skills, communication skills, and confidence.

4. Establishing Impact

In this section, we calculated four important components:

- a. Deadweight: a measure of the amount of outcome that would have happened even if the activity had not taken place.
- b. Attribution: an assessment of how much of the outcome was caused by other organizations or people's contribution.
- c. Displacement: an assessment of how much of the activity displaced other outcomes.
- d. Drop Off: a calculation of how long the outcomes will last.

By taking these four important components into account, we ensured that we do not overestimate the program's value.

5. Calculating SROI

Once we established the program's final impact, we aggregated all of the valued outcomes. We compared them in a ratio to the total spent on the program. The final product was a ratio. For example, 2:1; for every \$1 invested into the program generated \$2 of social value. Additionally, we also provided some sensitivity analysis for all important inputs for this section.

6. Reporting

Finally, we reported the entire evaluation findings, including a narrative from the analysis and key informant interviews.

In order to help guide this process, our team has utilized several sources, but the most important guides include:

- A Guide to Social Return on Investment, a comprehensive guide published by the Scottish government
- Measuring Value: A Guide to Social Return on Investment, a guide that details the standards for rigorous SROI evaluations
- Investing in the Future: The impact of youth programs in remote central Australia a Social Return on Investment Analysis, a Social Return on Investment evaluation on youth programs.

Data Collection & Sources

To answer both evaluation questions 1 and 2, we used two sources of data collection.

- Qualitative Key Informant Interviews: We conducted qualitative interviews with IYF staff to better understand their perspectives on the activity's value add. Interviews occurred with two groups of stakeholders: IYF based in the United States and IYF staff based in Mexico.
- 2. **Quantitative Survey:** Based on the benefits and unintended consequences identified in the qualitative key informant interviews, we released a questionnaire in Spanish to IYF Mexico staff, teachers in the TVET school system, and students to better understand their perspectives on the activity. Due to time constraints and resource limitations, the survey was a convenience sample. First, we distributed the questionnaire to IYF Mexico staff, who then passed it onto TVET teachers, who finally distributed it to the students. Below is a breakdown of stakeholders in each category in 2020 and the total number of respondents from the survey.

Stakeholder	Total Number of Stakeholders (2020)	Number of Stakeholders who responded to the survey
IYF Mexico Staff	NA	3
TVET Teachers	166	7
PTS Students	31,882	30

Our team analyzed the qualitative data for recurring themes to identify stakeholder-identified outputs and the qualitative data from the survey and triangulated results to articulate the monetary value.

To answer this evaluation question 3, we conducted a limited number of qualitative interviews with the South African PTS local Staff to understand the differences between the Mexican and South African programs. This, combined with the first two evaluation questions' data, helps the team answer the final evaluation question.

Analysis of Findings

This section presents the findings from the five steps of SROI methodology. Using this methodology, we calculate the expected value of Passport to Success (PTS) to its stakeholders in Mexico.

1. Establishing Scope and Identifying Key Stakeholders

The scope of the SROI analysis was to evaluate and measure the total social value produced by the PTS program implemented in TVET public schools in Mexico over five years from its implementation in 2020. We assessed the impact of the PTS program, identified the monetary value of the outcomes, and then communicated these findings and implications to IYF.

We defined the key stakeholders as those who experience the most change due to the PTS under analysis or those whose influence can directly affect the PTS outcome. Based on our consultations with the IYF home office and past impact evaluation of the PTS program in Mexico (2016), we listed the stakeholders that experienced significant changes due to PTS intervention in Table 1. However, due to resource and time constraints, we focused on students and school as the direct beneficiaries and the community as the representation of indirect beneficiaries of PTS.

Key stakeholders	Rationale for inclusions	Interactions
Students - Age 15 - 25 years old - Enrolled in TVET public school - Enrolled in PTS program	The students are the primary target of the PTS program, and by taking part in it, the lives of the students are likely to be significantly impacted.	GW online questionnaire distributed by the TVET teachers Past Impact Evaluation of the PTS program (2016)
School - Teachers enrolled in PTS training - Staff who administer the PTS program	PTS program engages with school (teachers and staff) to support the delivery of the program. The school's experience changes as a result.	GW online questionnaire distributed by IYF home offices
Community	Students that participate in the PTS program engage with the members of the community. With these interactions, community experiences change.	Direct - None GW online questionnaire to teachers and IYF home and country offices on 'Community Outcomes'

Table 1: S	Stakeholders	Criteria
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Excluded stakeholders	Rationale for exclusions	Interactions
Family of the students	The students' families, including parents, are excluded in this study because they were not direct beneficiaries of the PTS program, therefore not directly impacted by it. Secondly, given the scope, purpose of the PTS program in Mexico and the timeframe of this study, it was not feasible to include the students' families as a stakeholder.	N/A
Employers	Employers were excluded in this study because this SROI analysis focuses on IYF PTS intervention in select Mexican TVET public schools.	N/A
Secretariat of Public Education (SEP)	Even though SEP is the PTS program oversight committee, they do not experience any change due to the PTS program. SEP has the responsibility to ensure the implementation quality of the PTS. SEP is a "vocal ambassador" of the PTS because they value the IYF partnership in enhancing and transforming their educational services. It is worth mentioning that SEP provides no funding for PTS implementation in Mexico.	N/A

2. Mapping Outcomes

To understand how PTS brings about change for the various stakeholders and in what circumstances, we used the 2016 PTS impact evaluation and interviews with IYF staff to develop the impact map. The impact evaluation and interview results gave us an understanding of the impact the program had on each stakeholder, presented in the impact map below in Table 2. The inputs include the costs associated with the time contribution of stakeholders and expenses paid by the IYF donors and schools. We combined these various costs to generate total inputs for the PTS's SROI.

Table 2: Mapping Outcomes

STAVEHOLDER		INPUTS		0.1.mp1.mg		OUTCOMES	
STAKEHOLDER	Descriptions	Value (Mex\$)	ACTIVITIES	OUTPUTS	Short-Term (12 months)	Long-Term (3+ years)	IMPACTS
Students	Time for attending classes	0 (Since PTS is part of the regular classes, students do not put in extra hours.)	Learn life skills provided by the PTS program	Number of students trained in the PTS program	 Develop positive mindset Develop interpersonal skills Develop community mindset Increase ability to understand requirements for employment in the formal sector 	 1.1 Improved life skills 1.2 Increased academic performance 1.3 Developed positive connections 1.4 Improved mental health and wellbeing 1.5 Increased engagement in education 1.6 Improved prospects for employment 	Students feel more prepared to navigate a range of professional, academic, and civic contexts.
Schools	Printing PTS modules for students Extra time Teachers put in for preparing PTS lessons	Mex\$717,345 per semester Mex\$ 5,512 per teacher per year (see Appendix G for calculation)	Participate in PTS training of trainers Trained students in class	Number of teachers trained by the PTS training	 School attendance promoted Students learn to participate in engaging class activities 	 2.1 Improved teaching practice 2.2 Improved school discipline 2.3 Developed positive connections for schools and teachers 2.4 Improved interpersonal skills of trained teachers 2.5 Improved the image of the school in the neighborhood 	The community perceived students as competent in a range of professional, academic, and civic contexts.
Community	Time of community members makes to listen about PTS and share it with others.	0 (Since community members are not putting in any hours into the program)	Share about PTS with neighbors, friends, and colleagues	Number of people who heard about PTS from a community member	 Youth were engaged in school Community had minimal disruptions Opportunities were increasing for community members 	 3.1 Improved perceptions of young people coming out of TVET schools 3.2 Reduced probability of youth getting involved in dangerous or criminal activities 3.3 Increased number of jobs for teachers/ facilitator/tutor/staff which are required to support the program 	Students contributed to the common good of their community as active citizens.
IYF Donors		Mex\$517k-1414k per school/system					
Total Inputs	Sum of inputs of (see Appendix G	stakeholders + donors for calculation)					

3. Evidencing Outcomes and Giving Them a Value

a. Data Collection

As discussed above in Step 2, we determined the outcomes using past impact evaluation. However, to gain a deeper understanding of PTS outcomes that have occurred and to what extent, we conducted in-depth semi-structured zoom interviews with the IYF home office and Mexico office staff. We assigned indicators to each outcome with the information from our initial interview (see Table 3 for indicator list), which we used to build our quantitative survey (see Appendix B for list of staff interviewed).

The primary source of the data collection was the quantitative survey. We invited the students and teachers who met the criteria described in Step 1 to complete the online

questionnaire (see Appendix C for questionnaire). In total, we had 40 respondents complete the questionnaire. Of the 40 respondents: 30 were students, 7 were TVET teachers, and 3 were IYF Mexico staff. The respondents were 75 percent female, 21 percent male, and 3 percent non-binary. Of the respondents, 97 percent identified as Hispanic or Latino, while the other 3 percent identified as



black. The age range for the students that participated in this survey was 91 percent under 18 years old (see Figure 1 for detailed age range).

b. Evidencing Outcomes

Through the stakeholders' questionnaire, we gathered adequate evidence to support the outcomes that we identified in Step 2 and the outcomes' duration. In summary, the questionnaire results indicate that more than 70 percent of respondents agree that the outcomes listed below in Table 3 applied to them. For this study, we assumed that outcomes for respondents who took part in the survey applied to each stakeholder group. To determine the quantity of the indicators, we calculated the percentages using the

questionnaire's results by combining total respondents that agree and strongly agree with the mentioned outcomes then divide it by total respondents overall (n/respondents; percentage). Then, we multiplied the percentage with the total PTS students in 2020 (see Table 3 for results and Appendix E for detailed calculation).

From the initial interviews, we found that IYF designed the PTS programs to help students make long-term and lasting changes while still in school and long after graduation day. Thus, we determined the maximum benefit duration for the students to be five years in total (in other words, the benefits last for four additional years beyond the investment period). Furthermore, the questionnaire results showed that 37 percent of the respondents believe that the outcomes lasted more than five years. Another 27 percent believe it lasted from 1 up to 5 years, 17 percent believe it lasted less than 12 months, and 19 percent believe it did not apply or they did not know. Using these results as the basis, we determined the duration for each outcome in Table 3 below.

c. Valuing Outcomes

We used the indicators to identify financial proxies for each outcome and to assign a financial value to the social benefits produced. For each of these outcomes, we set a financial proxy that would reflect the intangible change that had taken place for the stakeholders (see Table 3 below). The process of determining the financial proxy based on past SROI studies revealed preference and matched to evidence from the questionnaire. We conducted comprehensive research of third-party sources in Mexico to identify and assign the most accurate proxies possible (see Appendix F for complete references of financial proxy). However, where needed, we applied common sense assumptions and logical thinking. We made conservative assumptions not to overstate the impact of the outcomes.

Stakeholder	Outcomes	Outcomes Indicator	Quantity	Duration (years)	Financial Proxy	Proxy (Mex\$)
Students	1.1 Improved life skills	PTS helps me gain better life skills, including problem-solving, critical thinking, decision-making skills, and understand myself more	22,221	3	Cost of behavioral/life skills training program	3,600
	1.2 Increased academic performance	PTS helped me improves my grades	19,322	3	The average cost of after school programs/ tutoring that could achieve similar results	1,350
		PTS helped in reducing dropouts	28,694	3	Cost savings of remediation	2,400
	1.3 Developed positive connections	PTS helped me have a better relationship with my friends/colleague	21,255	5	Cost of behavioral/life skills training program	3,600
		PTS helped me have better communication skills	22,221	3	The average cost of effective communication courses	1,500
		PTS helped me fixing pending family or surrounding problems	22,221	5	Cost of social and emotional development courses	5
		PTS helped me be more engaged in social and community activities/helped create a sense of community and belonging	22,221	5	Cost of social and emotional development courses	5
	1.4 Improved mental health and wellbeing	PTS helped me improve my mental health	23,187	3	Cost of attending psychological counseling sessions	3,132
	1.5 Increased engagement in education	Be more active in class/more engaged in school and convey the knowledge acquired in this class to others	19,322	3	Cost of engagement in school: summer camps	1,200
		PTS helped me gain digital literacy skills	21,255	5	Cost of attending digital literacy course	399
	1.6 Improved prospects for	PTS helped me obtain skills that in turn increases my employability	22,221	3	Cost of certification of competence	143
	employment	PTS provides me with career counseling	23,187	3	Cost of vocational psychology	522
		PTS helped me increase my work productivity	20,289	3	Cost of a course for strengthening soft skills or team building	3,468
School	2.1 Improved teaching practice	Higher motivation among teachers/improved teachers' dedication to classes	149	5	Cost of continuing training program for teachers	1,000
		Enhanced teachers' ability to deliver effective curriculum	166	5	Cost of accredited teacher training on pedagogical training	4,600
	2.2 Improved school discipline	Decreased the amount of disciplinarian write-ups/actions against students	19,129	3	Cost savings from working on administrative actions	192
		Lower teachers' absenteeism and turnover	149	3	Cost of continuing training program for	1,000

Table 3: Outcomes, Indicators, and Financial Proxy

					teachers	
	2.3 Developed positive connections for schools and teachers	Ties of trust between peers, teachers, and parents as it is a comprehensive program	59	3	Cost of communications and outreach to parents	372,000
	2.4 Improved interpersonal skills of trained teachers	Improved teachers' communication skills and conflict resolution skills both at school and at home with their families	149	5	Cost of Continuing Training Program for Teachers	1,000
	2.5 Improved image of the school in the neighborhood	Improved the image of the school in the neighborhood	53	3	Cost of quality assurance for schools	23,461
Community	3.1 Improved perceptions of young people coming out of TVET schools	Improved perceptions of young people coming out of TVET schools	66	3	Cost of promotional and goodwill activities for TVET public schools (newspaper)	48,000
	3.2 Reduced probability of youth getting involved in dangerous or criminal activities	Reduced probability of youth getting involved in dangerous or criminal activities	12,753	3	Cost-saving on per capita economic cost of violence	39,090
	3.3 Increased number of jobs for teachers/facilitator/tu tor/staff which are required to support the program	Increased number of jobs for teachers/facilitator/tutor/staff which are required to support the program	19	1	Multiplier effect on the economy due to higher incomes and consumption	129,331

4. Establishing Impact

To ensure our SROI analysis did not overclaim the benefits, we assessed whether the outcomes above were the results of the PTS program only or due to other activities. We used four precautionary filters: deadweight, displacement, attribution, and drop-off.

Deadweight refers to the proportion of observed change that stakeholders would experience over the study period, regardless of taking part in the PTS program. For calculating this, we assumed a benchmark of 100% where the respondents would be regardless of PTS, i.e., they could attain the outcomes either through their regular classes or by engaging in some other similar activities. Respondents who replied with a "not applicable/prefer not to say" or "strongly disagree," or "disagree" or "neither agree nor disagree" were assumed to remain at the benchmark. If they chose "agree" or "strongly agree," we assumed that they moved 50% and 100%, respectively, above the benchmark due to PTS. Using these percentages as weights, we calculated, on average, how much the respondents moved above the benchmark (say they moved to 140%). Consequently, we calculated the percentage of benchmark out of this total change to get to the deadweight percentage (i.e., 100%/140%=71% as deadweight).

Attribution shows our recognition of how organizations of people outside of the PTS program contributed to the outcomes. Likert-scale questions were included in the questionnaires for respondents to estimate the attribution percentages for each outcome. For example, we asked the students in the questionnaire if their life skills improved due to taking part in the PTS program. If they chose "not applicable/prefer not to say" or "strongly disagree," we applied a 100% attribution percentage since other activities caused the outcome. If they chose "disagree," a percentage of 75% was applied. If they chose "neither disagree nor agree," a percentage of 50% was applied. Lastly, if they chose "agree," a percentage of 25% of the outcome arising from elsewhere was applied. We aggregated and used the mean responses as the proportion to include in the stakeholder group analysis.

Displacement refers to whether the PTS program displaced other outcomes, e.g., a gain of students under PTS is at the expense of those who are not under PTS. For the PTS program,

we did not find any outcome that caused displacement. It was 0% for all the outcomes of the program.

Drop-off refers to a diminution of the outcomes of the PTS program, which might continue to last for many years, at lower or similar levels, influenced by other factors. Even if the outcomes' effect lasts as long as designed, we assume its effect may not be strong as it was while the students were in the program. We used past relevant SROI studies as our reference and applied the effect diminished by 25% each subsequent year after year 1.

5. Calculating SROI Ratio

To calculate the SROI ratio, we first set out the impact values calculated in Table 4 below for each outcome under Year 1 of the program. Then we copied the value for each outcome across the number of years it lasts as listed under the duration column and subtracted the drop off for each of the future years after the first year. Since we expected all program outcomes to last for a maximum of five years, we projected the outcomes over five years into the future in our SROI calculation.

Next, we summed the impact values for each year across all the outcomes and discounted the future impact values of years 2, 3, 4, and 5 by applying a discount rate of 3.5% as recommended by the various SROI guides referred to for this research. Summing up all the five present values, we arrived at the Total Present Value of the program outcomes over the five years.

Present =	Value of Impact in	Value of Impact in	Value of Impact in	Value of Impact in	Value of Impact in
Value	year 1*	$\underline{\text{year } 2}$	$$ year 3 $(1+r)^{2}$	$$ year 4 $(1+r)^{2}$	year 5
	-	(1+r)	$(1+r)^{2}$	(1+r)^3	(1+r)^4

*year 1 is the year in which the program is running

After calculating the present value, we deducted the financial value of the inputs (the investment) to arrive at the Net Present Value (NPV).

NPV = [Total present value of the benefits] - [Value of the inputs]

Finally, to get to the SROI ratio, we divided the Total Present Value by the value of inputs.

 $SROI = \frac{Total \ present \ value}{Value \ of \ Inputs}$

For this analysis the social return ratio in year 1 is:

 $\frac{Mex\$202,591,759}{Mex\$65,396,257} = 3.10:1$

This ratio means every Mex\$1 investment in the PTS program in year 1 creates a social value of Mex\$3.10.

Taking the ripple effects of the benefits generated by training the teachers and students in year 1 in the future leads to an increase in social return ratio to

Mex\$468,981,139	=	7.17 : 1 in year 5
Mex\$65,396,257		-

This ratio means that for every Mex\$1 invested in the PTS program in year 1, a Mex\$7.17 of social value is created by year 5.

Table 4: Filters and SROI Calculation

									Impact	Discount Rate		3.50%		
Stakeholder	Outcomes	Outcomes Indicator	Financial Proxy (Mex\$)	Quantity	Deadweigh t (%)	Attributio n (%)	Displace ment (%)	Drop Off (%)	Qty times financial proxy, less deadweight, displacement, and attribution	Year 1	Year 2	Year 3	Year 4	Year 5
Students	1.1 Improved life skills	PTS helps me gain better life skills, including problem-solving, critical thinking, decision-making skills, and understand myself more	3,600	22,221	65%	27%	0%	25%	20,533,434	20,533,434	15,400,075	11,550,057	0	0
	1.2 Increased academic	PTS helped me improves my grades	1,350	19,322	71%	34%	0%	25%	4,991,390	4,991,390	3,743,543	2,807,657	0	0
	performance	PTS helped in reducing dropouts	2,400	28,694	59%	15%	0%	25%	24,102,792	24,102,792	18,077,094	13,557,821	0	0
	1.3 Developed positive connections	PTS helped me have a better relationship with my friends/colleague	3,600	21,255	67%	32%	0%	25%	17,035,280	17,035,280	12,776,460	9,582,345	7,186,759	5,390,069
		PTS helped me have better communication skills	1,500	22,221	65%	27%	0%	25%	8,555,597	8,555,597	6,416,698	4,812,524	0	0
		PTS helped me fixing pending family or surrounding problems	5	22,221	65%	27%	0%	25%	28,519	28,519	21,389	16,042	12,031	9,023
		PTS helped me be more engaged in social and community activities/helped create a sense of community and belonging	5	22,221	65%	30%	0%	25%	27,627	27,627	20,721	15,540	11,655	8,741
	1.4 Improved mental health and wellbeing	PTS helped me improve my mental health	3,132	23,187	63%	27%	0%	25%	19,821,555	19,821,555	14,866,166	11,149,625	0	0
	1.5 Increased engagement in education	Be more active in class/more engaged in school and convey the knowledge acquired in this class to others	1,200	19,322	71%	34%	0%	25%	4,436,791	4,436,791	3,327,593	2,495,695	0	0

									Impact	Discount Rate		3.50%		
Stakeholder	Outcomes	Outcomes Indicator	Financial Proxy (Mex\$)	Quantity	Deadweigh t (%)	Attributio n (%)	Displace ment (%)	Drop Off (%)	Qty times financial proxy, less deadweight, displacement, and attribution	Year 1	Year 2	Year 3	Year 4	Year 5
Students (cont.)		PTS helped me gain digital literacy skills	399	21,255	68%	33%	0%	25%	1,806,866	1,806,866	1,355,149	1,016,362	762,272	571,704
	1.6 Improved prospects for employment	PTS helped me obtain skills that in turn increases my employability	143	22,221	67%	30%	0%	25%	746,248	746,248	559,686	419,765	0	0
		PTS provides me with career counseling	522	23,187	63%	27%	0%	25%	3,303,593	3,303,593	2,477,694	1,858,271	0	0
		PTS helped me increase my work productivity	3,468	20,289	66%	32%	0%	25%	16,312,765	16,312,765	12,234,574	9,175,930	0	0
School	2.1 Improved teaching practice	Higher motivation among teachers/improved teachers' dedication to classes	1,000	149	54%	8%	0%	25%	63,495	63,495	47,621	35,716	26,787	20,090
		Enhanced teachers' ability to deliver effective curriculum	4,600	166	53%	5%	0%	25%	343,620	343,620	257,715	193,286	144,965	108,724
	2.2 Improved school discipline	Decreased the amount of disciplinarian write- ups/actions against students	192	19,129	69%	28%	0%	25%	826,381	826,381	619,786	464,840	0	0
		Lower teachers' absenteeism and turnover	1,000	149	54%	8%	0%	25%	63,495	63,495	47,621	35,716	0	0
	2.3 Developed positive connections for schools and teachers	Ties of trust between peers, teachers, and parents as it is a comprehensive program	372,000	59	56%	10%	0%	25%	8,838,720	8,838,720	6,629,040	4,971,780	0	0
	2.4 Improved interpersonal skills of trained teachers	Improved teachers' communication skills and conflict resolution skills both at school and at home with their families	1,000	149	56%	10%	0%	25%	59,760	59,760	44,820	33,615	25,211	18,908

									Impact	Discount Rate	3.50%			
Stakeholder	Outcomes	Outcomes Indicator	Financial Proxy (Mex\$)	Quantity	Deadweigh t (%)	Attributio n (%)	Displace ment (%)	Drop Off (%)	Qty times financial proxy, less deadweight, displacement, and attribution	Year 1	Year 2	Year 3	Year 4	Year 5
School (cont.)	2.5 Improved image of the school in the neighborhood	Improved the image of the school in the neighborhood	23,461	53	61%	18%	0%	25%	402,591	402,591	301,943	226,457	0	0
Community	3.1 Improved perceptions of young people coming out of TVET schools	Improved perceptions of young people coming out of TVET schools	48,000	66	56%	10%	0%	25%	1,267,200	1,267,200	950,400	712,800	0	0
	3.2 Lesser youth getting involved in dangerous or criminal activities	Reduced probability of youth getting involved in dangerous or criminal activities	39,090	12,753	77%	40%	0%	25%	69,024,040	69,024,040	51,768,030	38,826,022	0	0
	3.3 Increased number of jobs for teachers/facilit ator/tutor/staff which are required to support the program	Increased number of jobs for teachers/facilitator/tutor/ staff which are required to support the program	129,331	19	69%	33%	0%	25%	512,050	0	512,050	0	0	0
					1				•	202,591,759	152,455,870	113,957,865	8,169,680	6,127,260
								Present Va	alue	202,591,759	147,300,358	106,380,886	7,368,583	5,339,553
								Total Pres	ent Value (PV)					468,981,139
								Net Prese	nt Value					403,584,882
				Social Reti Mex\$	urn Mex\$ per 1	Year 1 (year of training)				Year 5 (four years after the training)				
										3.10				7.17

Sensitivity Analysis

To ensure the robustness of our SROI analysis, we also performed sensitivity checks altering various assumptions to consider alternative scenarios and seeing which assumptions have the most significant effect on our SROI ratio. Table 5 outlines the sensitivity checks conducted for the PTS SROI in Mexico.

Assumption	SROI Ratio Year 1	SROI Ratio Year 5
Baseline SROI Ratio	3.10:1	7.17 : 1
Alter the improved communication skills (outcome 1.3) proxy to the lower bound	3.05 : 1	7.07 : 1
Alter the ties of trust (outcome 2.3) proxy to half	3.03 : 1	7.02 : 1
Alter deadweight of improves grades outcome from 71% to 97% (based on past impact evaluation report)	3.03 : 1	7.02 : 1
Alter deadweight of reducing dropouts outcome from 59% to 77% (based on past impact evaluation report)	2.94 : 1	6.81 : 1
Alter attribution improves grades outcome from 34% to 97% (based on past impact evaluation report)	3.03 : 1	7.01 : 1
Alter attribution of reducing dropouts outcome from 15% to 77% (based on past impact evaluation report)	2.83 : 1	6.57 : 1
Dropping six outcomes of the program that were based on anecdotal evidence	2.71 : 1	6.30 : 1
Adjusted discount rate from 3.5% (baseline) to 7% (upper bound)	3.10:1	6.97 : 1
Adjusted discount rate from 3.5% (baseline) to 5%	3.10:1	7.08 : 1
Adjusted discount rate from 3.5% (baseline) to 2% (lower bound)	3.10:1	7.26 : 1
Adjusted the duration for all outcomes up to 5 years period	3.10:1	9.01 : 1
0% drop-off after the investment period	3.10:1	9.52 : 1
100% drop-off after investment period/ Duration 1 year for all the outcomes	3.10:1	3.11 : 1
Adjusted the PTS financial inputs from the donors' side to the lower bound	5.66 : 1	13.09 : 1
Adjusted the PTS financial inputs from the donors' side to the upper bound	2.13 : 1	4.94 : 1
Adjusted the PTS financial inputs to include the internet access costs on the part of the students during the 2020 pandemic	2 :1	6:1

Table 5: Sensitivity of PTS SROI Ratio

Table 5 showed that while the SROI ratio did not appear to be particularly sensitive to changing proxy values, filters, or discount rates, it was more sensitive to significant drop-off time changes. However, even under such extreme tests of our assumptions, the return was always significantly higher than the investment, indicating that the models' overall finding of a positive return on investment was relatively robust.

Interpretation of Findings

Findings from the SROI analysis showed that the PTS produces positive benefits for students, schools, and communities in Mexico. According to our main estimate, for every \$1 invested in the PTS program in Mexico, there is a \$7.17 gain in benefits to stakeholders over five years. In other words, this program generates more than seven times the amount of value that it costs. To ensure the robustness of our SROI analysis, we also performed sensitivity checks altering various assumptions to consider alternative scenarios and seeing which assumptions have the most significant effect on our SROI ratio. In every iteration of the sensitivity analysis, the program had generated between \$3 and \$14 in benefits to stakeholders per \$1 invested. Below is a breakdown of our findings by research questions:

1. What is the monetary impact of the Passport to Success program in Mexico?

Through implementing the six stages of SROI (establishing scope and identifying stakeholders, mapping outcomes, evidencing outcomes and giving them a value, establishing impact, calculating SROI, and reporting), our team has determined that the Passport to Success program in Mexico generates a value \$3.10 in year 1 of the implementation. As we extrapolated the effects of the PTS program up to year five, the ratio rises to \$7.17 for every \$1 invested. The final ratio was established by assigning financial proxies to the outcomes identified by stakeholders and comparing the program's overall value to the costs identified by the International Youth Foundation. Should any of these variables change in the future, the excel model with these predictions can be adjusted, which will change the final ratio.

2. What is the future impact of the program in Mexico after five years?

To address this question, we utilized a drop-off filter to determine the outcomes of the PTS program, which might continue to last after the program is complete. Although the ideal scenario is that the intended outcomes last for life, we made reasonable assumptions that the program's effects will not be as strong once the students exit the program. Therefore, our team used previous SROI studies as our reference and applied a 25-percent drop-off rate, which diminished the program's effects each subsequent year after one year. We incorporated the drop-off rate into the final SROI ratio, which shows that for every \$1 invested in the PTS program in Mexico, there is a \$7.17 gain in benefits to stakeholders over five years.

3. What factors would need to be changed for IYF to calculate it for the South African program?

Based on the SROI evaluation of the Mexico PTS program, we created a roadmap for the IYF to replicate the analysis in South Africa. Below are the recommendations for how to replicate the model within South Africa based on the six stages of SROI:

a. Establishing scope and Identifying Stakeholders

After comparing the key informant interviews of IYF staff in Mexico and South Africa, our team concluded that the scope would largely remain the same, except for one difference in stakeholders. Key informant interviews revealed that the Mexico program focused on helping students academically. In contrast, the South Africa program has a more significant focus on job placement and career advancement. Thus, the South Africa program partners with employers in order to implement PTS. Due to this difference, our team would recommend replacing the teachers as a stakeholder group used in the Mexico model for an employer stakeholder group. If, however, more time and resources were available when replicating the research than were available during this iteration, the researchers should keep TVET teachers as a stakeholder group and add employers.

b. Mapping Outcomes

For the Mexico and South Africa PTS programs, the outcomes would largely remain the same, except for those within the employers' stakeholder group. Understandably, more key informant interviews would be needed to understand the outcomes that PTS achieves under this domain fully. Potential benefits include industry-recognized credentials and employment into a job that marks the start of a career (Schueler, n.d.). Another example, in our interview with IYF South Africa Country Director, she mentioned that PTS has helped encourage young black women to pursue careers in traditionally more maledominated fields. Our interviews did not elicit the full range of other outcomes. Therefore, more outcomes like this should be explored and further identified. Once other outcomes become clear through key informant interviews, a questionnaire could be created and distributed to the different stakeholders to gauge their agreement with the identified outcomes.

c. Evidencing Outcomes and Giving them a Value

Our team used previous SROI studies for credible financial proxy indicators with contextrelevant data to verify the outcomes and assign a monetary value for the Mexico model. Our team had to complete this process in two steps because we could not find SROI studies completed in Mexico for youth programs. Our team found SROI studies completed in South Africa for Youth Programs, expected to help researchers establish financial proxies for outcomes significantly. The distribution of the report will include these sources when shared with the IYF.

d. Remaining Step- Establishing Impact, Calculating SROI, Reporting

The remainder of the six stages of SROI can be completed similarly to the execution of the Mexico model.

Ratio Compared to Similar Studies

To help understand the calculated ratio better, our team sought out SROI evaluations of Youth Programs to understand the significance of the ratio. The study with the lowest SROI ratio was "The Value of Business Involvement in Youth Development," an SROI evaluation of leadership of youth and youth employment within South Africa. The evaluation determined that the program delivers an SROI of 0.83:1, i.e., every \$1 investment approximately creates \$0.83 of social value. It is noteworthy, however, that the key informant interviews helped identify some future outcomes. Therefore, the researchers also tested these outcomes as part of the sensitivity analysis to show the potential outcomes. If future outcomes included in the analysis had not occurred yet, an SROI of 4.72:1 would have been the outcome.

The study with the second-lowest ratio was the "Social Return on Investment Analysis: A Case Study of a Job and Skills Training Program Offered by a Social Enterprise," which analyzed the social impact of a social enterprise offering a job and skills training program to an unemployed, mainly female population in the United Kingdom. This study found that dollars invested in the job and skills training program yielded \$2.08 of social value.

The second-highest study is the "Social Return on Investment Analysis: Measuring Social Impact in Education," an analysis of the Beyers Naudé Schools Development Programme (BNSDP) in South Africa. The study evaluated the education program over five years. The researchers found that for every \$1 invested in the program, it would result in \$6.53 of social value. This study was closest in content and scope of work; however, their model differs from PTS, so that the Beyers Naude Schools Development Programme focuses on teaching students directly. PTS has the training, but the trainers model does not involve direct contact with participants.

The highest study, "JUCONI Casa de Jóvenes: A Unique Living, Learning and Healing Environment," was an analysis of JUCONI, a program that provides intensive educative-therapeutic attention to street-involved children, young people, and their families in Puebla, Mexico. The researchers found that for every \$1 invested in the program, it resulted in \$10 of social value.

Study	Ratio
The Value of Business Involvement in Youth Development	0.83:1
Social Return on Investment Analysis: A Case Study of a Job and Skills Training Program Offered by a Social Enterprise	2.37:1
Social Return on Investment Analysis: Measuring Social Impact in Education	6.53:1
IYF Passport to Success	7.17:1
JUCONI Casa de Jóvenes: A Unique Living, Learning and Healing Environment	10:1

Table 6: Similar Studies SROI Ratio Comparison

Limitations

Like all evaluations, this evaluation has its limitations. There are three significant limitations to note as follows.

• First, due to time and resource constraints, the survey was a convenience survey, so there are fundamental limitations for representation and generalizability. We distributed the questionnaire to IYF Mexico staff, who then passed it onto TVET teachers, who then

passed the survey onto PTS students. It is fair to assume the most engaged teachers got the questionnaire, passing it onto their most engaged students because we used the convenience sampling method. These responses could skew the results more positively than if we conducted a random sample of these groups.

- Secondly, even though we used established financial proxies and relevant available prices to assess the monetary value of the outcomes, some of the financial proxies were subjective based on common sense assumptions and logical thinking. Other research teams might decide on different proxies, depending on the study context.
- Lastly, our team could not obtain a complete picture of the costs associated with implementing the program. For example, the cost information that IYF provided is roughly per school. However, if more schools are collaborating in gaining joint access to the PTS program in the same municipality, the costs will fall.

Future Research

The George Washington research team has identified three main areas for future research that could help expand the current research and refine the current model. The three areas for future research are listed below:

- 1. *Complete the South Africa Model.* Portions of the work are already complete for the South Africa model. This report provides a detailed roadmap of having to complete the evaluation. If IYF finds the product of this model helpful in describing their program, it would be advantageous to complete the process for South Africa. Additionally, because the researchers could complete the model with existing information except for some additional data required about employers, the effort to complete this model would be less burdensome because of Mexico-focused work.
- 2. *Include Additional Stakeholders in the Mexico Model.* Due to time and resource constraints, the George Washington team confined the stakeholders to three broad categories. However, to make the model robust and reflective of all stakeholder benefits, it could be advantageous to add additional stakeholder groupings. Examples would include the families of the students.
- 3. *Refine Cost/Inputs.* IYF provided the George Washington team broad estimates of the monetary costs for running the program. However, there are several program inputs that

the local schools provided that are not well documented. For example, IYF does not provide schools with printed materials. IYF expects schools to bear the costs for any printed materials. Because IYF does not track these costs, the research team had to make assumptions not fully verified by interviews with stakeholders due to resource limitations. A closer examination of the program's actual inputs and costs would further help refine the model.

Conclusion

The George Washington research team thoroughly enjoyed the stimulating challenge of this evaluation. This research enables IYF to present the PTS program results as quantified social impacts, communicate them to funders, other stakeholders in Mexico and other countries where PTS is operational. Furthermore, the results can benefit the IYF Mexico team since they can now better articulate their work's benefits clearly to the Mexican government and communities. Lastly, IYF can utilize this report and the included model to improve the future social value of Passport to Success.

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Appendix A: Key Informant Protocol and Questionnaire

Passport to Success- IYF Staff Interviews

Introduction & Background:

Thank you for taking the time to speak with us. We recognize that your time is valuable, so we're grateful for the 30 to 45 minutes you have allotted to discuss Passport to Success.

I'm [Insert your name], and this is my colleague [insert note-takers name]. We are graduate students in public policy and administration at George Washington University, working on a probono consulting project for the International Youth Foundation as part of our master's program. We are evaluating the "Passport to Success Program" to develop a predictive model estimating the social return of investment of the program to better understand how it can benefit different communities.

As an FYI, we have built-in time at the end for you to provide any additional feedback or insights that we did not get a chance to discuss.

I will be facilitating the discussion, and my colleague [insert note-takers name] will be writing notes as we go along; however, to ensure the transcript's accuracy, would you feel comfortable if I record our conversation for note-taking purposes? We will delete the recording once we check for the accuracy of our notes and will not share the recording with anyone outside of our team.

[After recording starts, begin consent script]

Conclusion and Thank you

Thank you again for your time today. Your answers and insight are valuable and will be a great help for our final predictive model. If you have any additional input you would like to provide, please do not hesitate to reach out and email us by March 31.

General Notes/Protocol Throughout:

- 1. Pre-Interview: Notify participants via email/text before the interview that the interview will take between 30 and 45 minutes
- 2. Be cognizant of their time and begin and end promptly. However, if the interviewee is enjoying the interview, then ask, "We're approaching our allotted 45 minutes. Do you have a few more minutes for us?"
- 3. Transcribe: Directly transcribe the interview. i.e., If the interviewee says "I went..." transcribe "I went..." not "they went..."
- 4. Review Transcripts: As often as possible, review transcripts for accuracy directly following the interview.

Consent Script

Thank you again for your time today. Participating in this interview is voluntary. We expect the interview to last approximately 30 to 45 minutes. At any point during the interview, you may opt not to answer a question or end your participation.

The research team would like to be able to quote you in its report unless you chose to be anonymous. If you do not wish to include your name, we will only identify you by your job title and/or organization, whichever protects your identity best. Your name, title, or organization will be replaced by a letter or a number (i.e., Person A, Expert B, or Business 1). The data analysis presented in the final report will include summarized or aggregate data.

By signifying "yes" to the researcher (orally or written), you acknowledge and understand the terms above and will provide relevant and accurate information to the best of your ability.

Participation (Y/N) Anonymous (Y/N)

Verbal confirmation of participation (Y/N)

Passport to Success Staff Questionnaire

General Information						
Respondent Numerical Tag:	Interview_#					
Respondent Job Title						
Location of Participant						
GW Interviewer						
GW Note Taker						
Date						
Interview time start						
Interview time end						

Discussion Questions

Background Section

- 1. Please describe the Passport to Success program for us and what the intended goals of the program are.
- 2. Please describe your role as it relates to Passport to Success.

Participants

"This section looks to assess the intentional and unintentional impact that Passport to Success has had on Participants in the program. We define participants as students who took part in the curriculum."

- 1. As a result of completing the Passport to Success curriculum, what, if any, positive impacts have occurred for participants? (*Examples to offer if the respondent is struggling to think of anything- higher-paying jobs, better grades, more personal skills*).
- 2. As a result of completing the Passport to Success curriculum, what, if any, unintended impacts (positive or negative) have occurred for participants? (*Examples to offer if the respondent is struggling to think of anything- time in the program results from time away from work/school, better home life*).
- 3. From the impacts you've described above, please elaborate what inputs are necessary to make the impacts happen- i.e., time, money, resources.

Teachers/Staff

"This section looks to assess the intentional and unintentional impact that Passport to Success has had on teachers and school staff that continue to teach participants who have completed the program."

- 1. As a result of completing the Passport to Success curriculum, what, if any, positive impacts have teachers/school staff noticed from said participants? (*Examples to offer if the respondent is struggling to think of anything- higher grades, better attendance*).
- 1. As a result of completing the Passport to Success curriculum, what, if any, unintended impacts (positive or negative) have teachers/school staff noticed from said participants? (*Examples to offer if the respondent is struggling to think of anything- students miss out on regularly scheduled classes to attend the curriculum*).
- 1. From the impacts you've described above, please elaborate what inputs are necessary to make the impacts happen- i.e., time, money, resources.

Community

"This section looks to assess the intentional and unintentional impact that Passport to Success has had on the larger South African community."

- 1. Because participants have completed the Passport to Success curriculum, what, if any, positive impacts have the larger South African community experienced? (*Examples to offer if the respondent is struggling to think of anything- students are not applying for social security benefits, students are paying taxes*).
- 1. Because participants have completed the Passport to Success curriculum, what, if any, unintended impacts (positive or negative) has the larger South African community experienced? (*Examples to offer if the respondent is struggling to think of anything- the job market is more saturated*).
- 1. From the impacts you've described above, please elaborate what inputs are necessary to make the impacts happen- i.e., time, money, resources.

Sustainability

1. Do you have any thoughts on what could be done in order to make the program more sustainable- (i.e., allow the benefits from the program to last longer)?

Name	Title	Office
Linda Fogarty	Director of Measurement, Evaluation, Research, and Learning (MERL)	US Office
Amy Zangari	Senior Technical Advisor MERL	US Office
Jimmy Ortez	Finance Coordinator for Americas Region	US Office
Jorge Barragan	Country Director	Mexico Office
Andrea Padilla	Program Manager	Mexico Office
Lucia Hernandez	Measurement and Evaluation Specialist	Mexico Office
Judith Hermosillo	Program Officer	Mexico Office
Stephanie Potenciano	Finance Coordinator	Mexico Office
Anusha Naicker	Country Director	South Africa

Appendix B: Key Informant List

Appendix C: Outcomes Questionnaire

Passport to Success Questionnaire - Outcomes

Opening Description

Thank you for agreeing to participate in this questionnaire! Participation is completely voluntary, and all responses will be confidential and only reported at the aggregate level.

This survey is being administered on behalf of the International Youth Foundation (IYF) by a group of graduate students from the George Washington University Trachtenberg School of Public Policy and Public Administration as a pro-bono consulting project.

The purpose of this questionnaire is to evaluate the social value of IYF's Passport to Success (PTS) program. The survey should take approximately 5-10 minutes to complete. Be assured that all answers you provide will be kept confidential.

- Q1. What is your involvement in the Passport to Success (PTS) program?
 - IYF Country Office (Mexico/South Africa)
 - Student/Participant
 - TVET Teacher
 - IYF Home Office
 - Other

Question 2 through 4 only applicable if the respondents chose "Student/Participant" in Q1

Q2. What benefits did you gain from PTS?									
People gain different benefits from the PTS program. Please select the box that most appropriately describes your opinion for each row.									
	Not Applicable/ Prefer Not To Say	Strongly Disagree	Disagree	Neither Disagree/N or Agree	Agree	Strongly Agree			
PTS helps me gain better life skills, including social, communication, problem-solving, critical thinking, decision-making, and interpersonal skills									
PTS helped me have a better relationship with my									

friends/colleague			
PTS helped me attain better grades in school			
PTS helped me obtain skills that in turn increases my employability			
PTS helped me get a job			
PTS helped me increase my work productivity			
PTS helped me be more engaged in social and community activities			
PTS helped me gain digital literacy skills			
PTS helped me improve my mental health			

Q3. How long do you expect these benefits to last?

People gain different benefits from the PTS program. Please select the box that most appropriately describes your opinion for each row.

	Not Applicabl e/I don't know	Less than 12 months	1-5 years	More than 5 years
PTS helps me gain better life skills, including social, communication, problem-solving, critical thinking, decision-making, and interpersonal skills				
PTS helped me have a better relationship with my friends/colleague				
PTS helped me attain better grades in school				
PTS helped me obtain skills that in turn increases my employability				
PTS helped me get a job				
PTS helped me increase my work productivity				
PTS helped me be more engaged in social and community activities				
PTS helped me gain digital literacy skills				

PTS helped me improve my mental health					
--	--	--	--	--	--

Q4. Please describe any additional benefits that were not previously identified.

Q4 is the last question for Student/Participant; continue to demographic information.

Question 5 through 8 only applicable if the respondents chose "TVET Teacher" in Q1

Q5. What benefits have you noticed from participating in the Passport to Success (PTS) program?

Please select the box that most appropriately describes your opinion for each row.

	Not Applicable/ Prefer Not To Say	Strongly Disagree	Disagree	Neither Disagree/N or Agree	Agree	Strongly Agree
Enhanced ability to deliver effective curriculum						
Improved engagement in school activities						
Improved school attendance						
Improved the image of the school in the neighborhood						
Decreased the amount of disciplinarian write-ups						
Improved interpersonal communication between students (i.e., better conflict resolution skills)						

Q6. Please describe any additional benefits that were not previously identified.

Q7. What benefits have you identified in the community from your school engaging in the PTS program?

Please select the box that most appropriately describes your opinion for each row.								
	Not Applicable/ Prefer Not To Say	Strongly Disagree	Disagree	Neither Disagree/N or Agree	Agree	Strongly Agree		
Improved perceptions of young people								
Reduced unemployment								
Reduced young people on unemployment benefits								
Increased tax base from participants finding a tax-paying job after the program								
Reduced crime rates								
Increased number of teaching jobs from a higher number of school staff and faculty that are required to support the program								

Q8. Please describe any additional benefits that were not previously identified.

Q8 is the last question for TVET Teachers; continue to demographic information.

Question 9 through 16 only applies if the respondents chose "IYF Country Office/IYF Home Office" in Q1.

Q9. Is your knowledge of benefits gained from PTS first-hand or second-hand knowledge?

- First Hand (i.e., you've witnessed the benefits yourself)
- Second Hand (i.e., you've heard others describe the benefits)

Impact on Student/Participant

This section looks to assess the intentional and unintentional impact that PTS has had on participants in the program. We define participants as students who took part in the curriculum with PTS. Please select the box that most appropriately describes your opinion.

Q10. What benefits do students gain from PTS? Please select the box that most appropriately describes your opini	on for each row	7				
	Not Applicable/ Prefer Not To Say	Strongly Disagree	Disagree	Neither Disagree/N or Agree	Agree	Strongly Agree
PTS helps participants gain better life skills, including social, communication, problem- solving, critical thinking, decision-making, and interpersonal skills						
PTS helps participants have a better relationship with friends/colleague						
PTS helps participants attain better grades in school						
PTS helps participants obtain skills that in turn increases their employability						
PTS helps increase graduation rates						
PTS helps participants get a job						
PTS helps participants increase their work productivity						
PTS helps participants be more engaged in social and community activities						
PTS helps students gain digital literacy skills						
PTS helps students improve their mental health						

Q11. Please describe any additional benefits received by students/participants that were not previously identified.

Q12. Please specifically describe what inputs, i.e., time, money, etc. are necessary to ensure students/participants receive the benefits you mentioned above

Impact on TVET Teachers

This section looks to assess the intentional and unintentional impact that PTS has had on teachers and school staff that continue to teach participants who have completed the PTS training. Please select the box that most appropriately describes your opinion.

Q13. What benefits have TVET teachers noticed from participating in the PTS program?

	Not Applicable/ Prefer Not To Say	Strongly Disagree	Disagree	Neither Disagree/N or Agree	Agree	Strongly Agree
Enhanced ability to deliver effective curriculum						
Improved engagement in school activities						
Improved school attendance						
Improved image of the school in the neighborhood						
Decreased the amount of disciplinarian write-ups						
Improved interpersonal communication between students (i.e., better conflict resolution skills)						

Q14. Please describe any additional benefits teachers and school staff received and that were not previously identified.

Q15. From the benefits you've described for TVET teachers, please elaborate on what inputs are necessary to make the impacts happen- i.e., time, money, resources. Please be as specific as possible.

Impact on Community

This section looks to assess the intentional and unintentional impact that PTS has had on the larger South African community. Please select the box that most appropriately describes your opinion.

Q16. What benefits have been identified in the community from schools engaging in the PTS program?

	Not Applicable/ Prefer Not To Say	Strongly Disagree	Disagree	Neither Disagree/N or Agree	Agree	Strongly Agree
Improved perceptions of young people						
Reduced unemployment						
Reduced young people on unemployment benefits						
Increased tax base from new jobs obtained by young people						
Reduced crime rates						
Increased number of teaching jobs from a higher number of school staff and faculty that are required to support the program						

Demographic Information

The purpose of the demographic information (e.g., age, gender, etc.) is to help us analyze the results by statistical categories and will not be used to identify the respondents. Completing this section is OPTIONAL. If you choose NO, this is the end of the questionnaire page. Please don't forget to click the submit button on the next page to save your answers.

Q17. Are you willing to fill the demographic information section?

- Yes
- No

Q18. What is your age range? *

• Under 18 years

- 18-21 years
- 22-25 years
- 25 and above

Q19. What is your ethnicity? (Mexico)	(South Africa)
• Hispanic, Latino, or Spanish Origin	• Black
• Black, African-American	Colored
• White	• White
• Asian	• Asian
• Other:	• Other:

Q20. What is your Gender? *					
• Male					
• Female					
• Trans-Gender					
• Non-Binary					
• Prefer not to say					

Closing Description

Thank you so much for your response! If you have any additional input you would like to provide, please do not hesitate to send an email to grflanagan@gwmail.gwu.edu.

Please continue to stay safe!

Appendix D: Inputs Questionnaire

Passport to Success - Inputs Questionnaire

Introduction & Background:

Thank you for agreeing and taking the time to answer these questions.

We are graduate students in public policy and administration at George Washington University, working on a pro-bono consulting project for the International Youth Foundation as part of our master's program. The following questions will help us evaluate the Passport to Success (PTS) program and develop a predictive model estimating the social return of investment of the program to better understand how it can benefit different communities.

It should take approximately 15-30 minutes to complete the questions (16 questions in total). Be assured that all answers you provide will be kept confidential.

Q1. Please describe your role as it relates to IYF - Passport to Success (PTS)

Q2. Using these following metrics, please choose the year for which PTS data would be available for sharing with us. We will fix that year for our analysis.

Selected year: (*please type the year here*)

Metrics	Data
Number of states in Mexico running PTS (if possible, please specify the state name)	
Number of TVET schools in Mexico running PTS	
Number of teachers trained under PTS	
Number of students reached under PTS	
Number of facilitators, consultants, tutors under the PTS network	

For the following questions, please try to provide the data <u>for the same year</u> that you used for answering Q2 above for data consistency. Otherwise, please mention the years to which the data belongs.

Q3. Please identify the various inputs involved with PTS, like salaries, class equipment, supplies, outreach, and other related activities.

How much monetary contribution (\$\$\$) did the IYF-PTS funders put into the PTS program in Mexico towards these inputs in the above selected year?

Q4. Do IYF-PTS funders put in any non-monetary contributions (inputs that go into the program but are not accounted for in dollar terms) at any stage of PTS? If yes, please describe.

Q5. Does the Mexican Government put in any monetary contributions at any stage of PTS? If yes, please provide the monetary value for the above-selected year, and elaborate on which inputs are being funded with these funds.

Q6. Does the Mexican Government put in any non-monetary contributions at any stage of PTS? If yes, please describe.

Q7. Do students/participants put in any monetary contributions towards PTS? If yes, please describe and provide the monetary value for the above-selected year. (For example, they need to pay fees to enroll in PTS training in \$\$)

Q8. Do students/participants put in any non-monetary contributions towards PTS? If yes, please describe. (For example, extra time for these PTS classes/homework/supplies, or does it affect their part-time/full-time job hours?)

Q9. Do TVET school teachers put in any monetary contributions towards PTS? If yes, please describe and provide the monetary value for the above-selected year. (For example, they need to pay for fees for getting PTS training of trainers in \$\$)

Q10. Do TVET school teachers put in any non-monetary contributions towards PTS? If yes, please describe. (For example, extra time over and above school hours for training sessions, preparing lessons)

Q11. Do TVET school admin staff put in any monetary contributions towards PTS? If yes, please describe and provide the monetary value for the above-selected year. (For example, they need to pay fees for enrolling their schools in PTS program in \$\$)

Q12. Do TVET school admin staff put in any non-monetary contributions towards PTS? If yes, please describe. (For example, extra time over and above school hours on admin and management of PTS with IYF and government)

Q13. Do PTS Facilitators/Trainers/Tutors put in any non-monetary contributions towards PTS? If yes, please describe. (For example, extra time or effort they put in beyond their salaried work hours)

Q14. Are there any volunteers involved in running PTS in Mexico? How many? And how many hours do they put into the program in one week? If any, please describe the benefits they get by being involved with the program. (For example, certificates/feeling of social good)

Q15. Does the Mexican community put in any non-monetary contributions into PTS? If yes, please describe. (For example, the extra burden they have to bear because of the program running in Mexican public schools)

Q16. In the Mexico context, we also need financial proxies to monetize various non-monetary benefits and inputs we have identified for the stakeholders.

Could you suggest any good resources where one can find this information? (Examples: leadership course costs, monetize mental health benefits, youth workers wage rates in Mexico)

General Information and Closing Notes

We will protect the confidentiality of all respondents. If we quote you, we will only identify you by your job title or organization, whichever protects your identity best. If you prefer that we do not use quotes from this questionnaire, please note that here

Name (if you do not wish to include your name, please leave this row blank)	
Job Title	
Office Location	

Thank you again for your time! Your answers and insight are valuable and will be a great help for our final predictive model. If you have any additional input you would like to provide, please do not hesitate to reach out and email to <u>nehamathur@gwu.edu</u> by April 2.

Please continue to stay safe!

Appendix E: Quantity Calculation

Outcomes Indicator	Total PTS Stakeholders	Total Questionnaire Respondents	Total Questionnaire Respondents that agree and strongly agree with the outcome	Percentage Respondents	Quantity of outcomes applied to participants total
	A	В	С	D=C/B*100%	E=A*D
PTS helps me gain better life skills, including problem-solving, critical thinking, decision-making skills, and understand myself more	31,882	33	23	70%	22,221
PTS helped me improves my grades	31,882	33	20	61%	19,322
PTS helped in reducing dropouts	31,882	10	9	90%	28,694
PTS helped me have a better relationship with my friends/colleague	31,882	33	22	67%	21,255
PTS helped me have better communication skills	31,882	33	23	70%	22,221
PTS helped me fixing pending family or surrounding problems	31,882	33	23	70%	22,221
PTS helped me be more engaged in social and community activities/helped create a sense of community and belonging	31,882	33	23	70%	22,221
PTS helped me improve my mental health	31,882	33	24	73%	23,187
Be more active in class/more engaged in school and convey the knowledge acquired in this class to others	31,882	33	20	61%	19,322
PTS helped me gain digital literacy skills	31,882	33	22	67%	21,255
PTS helped me obtain skills that in turn increases my employability	31,882	33	23	70%	22,221
PTS provides me with career counseling	31,882	33	24	73%	23,187
PTS helped me increase my work productivity	31,882	33	21	64%	20,289
Higher motivation among teachers/improved teachers' dedication to classes	166	10	9	90%	149
Enhanced teachers' ability to deliver effective curriculum	166	10	10	100%	166
Decreased the amount of disciplinarian write-ups/actions against students	31,882	10	6	60%	19,129
Lower teachers' absenteeism and turnover	166	10	9	90%	149
Ties of trust between peers, teachers, and parents as it is a comprehensive program	66	10	9	90%	59
Improved teachers' communication skills and conflict resolution skills both at school and at home with their families	166	10	9	90%	149
Improved the image of the school in the neighborhood	66	10	8	80%	53
Improved perceptions of young people coming out of TVET schools	66	10	10	100%	66
Reduced probability of youth getting involved in dangerous or criminal activities	31,882	10	4	40%	12,753
Increased number of jobs for teachers/facilitator/tutor/staff which are required to support the program	27	10	7	70%	19

Stakeholder	Outcomes					
	Outcomes	Indicators	Financial Proxy	Rationale/Calculation	Sources	
Student/ Participant	1.1 Improved life skills	PTS helps me gain better life skills, including problem- solving, critical thinking, decision-making skills, and understand myself more	Mex\$3,600 Cost of behavioral/life skills training program	Interviews with IYF staff indicated that PTS is similar to a behavioral skills training program The cost for such a training course of 60 hours is Mex\$3,600	https://www.pontificia.edu.mx/e xtension/oferta- educativa/inteligencia- emocional/	
	1.2 Increased academic performance	PTS helped me improve my grades	Mex\$1,350 The average cost of after school programs/ tutoring that could achieve similar results	An alternative way for students to improve their grades is by taking a tutor after school. Tutoring services range from Mex\$2264 to 3250 for 120 hours (1 year). The average cost is Mex\$2,700 for a year or Mex\$1,350 for a semester of 60 hours	https://www.emagister.com.mx/ cursos apoyo estudiantes mate maticas_ciudad_mexico_distrit o_federal-kwprov-9186-68.htm	
		PTS helped in reducing dropouts	Mex\$2,400 Cost savings of remediation	The tuition fee of TVET public schools in Mexico are fully funded by the government; thus, we used estimated costs.	https://mistramitesyrequisitos.c om/mexico/requisitos-para- entrar-al- conalep/#Cuanto se paga en <u>Conalep</u>	
	1.3 Developed positive connections	PTS helped me have a better relationship with my friends/colleague	Mex\$3,600 Cost of behavioral/life skills training program	Interviews with IYF staff indicated that PTS is similar to a behavioral skills training program The cost for such a training course of 60 hours is Mex\$3,600	https://www.pontificia.edu.mx/e xtension/oferta- educativa/inteligencia- emocional/	
		PTS helped me have better communication skills	Mex\$1,500	An alternative way for students to improve their communication	https://www.emagister.com.mx/ curso comunicacion efectiva-	

		The average cost of effective communication courses	skills is by taking a communication course. Cost for communication for beginner course range from Mex\$1000-2000 The average = Mex\$1500	cursos-2508457.htm https://innovateca.com.mx/prod ucto/curso-comunicacion- efectiva-aula/
	PTS helped me fixing pending family or surrounding problems	Mex\$5 per student per year	Secretary of Public Education (SEP) provided a socio- emotional program (Construye	http://escolares.ujed.mx/Docum entos/Tutorias/05d-UNDP-MX- PovRed-CONSTRUYET-
	PTS helped me be more engaged in social and community activities/helped create a sense of community and belonging	Cost of social and emotional development courses	participating and 2 million students enrolled in the schools altogether.	INFOSHEET-V11ago14.pdf https://www.undp.org/search?q =construye+t
	belonging		Total one-year expenditures \$476,298 or Mex\$9,675,850, divided by 2 million students enrolled.	(click CDR 2013, it's the only recent one available)
			Mex\$5 per student per year allocated under this program.	
1.4 Improved mental health and well- being	PTS helped me improve my mental health	Mex\$3,132 Cost of attending psychological counseling sessions	The cost for each session is Mex\$522, assuming you need one session per month to gain the benefits. Estimated cost for one sem would be Mex\$3,132.	https://www.capi.com.mx/blog/ producto/programa-de- orientacion-psicologica-en- linea-pol/
1.5 Increased engagement in education	Be more active in class/more engaged in school and convey the knowledge acquired in this class to others	Mex\$1,200 Engagement in school (summer camp)	Summer camp is an alternative way to increased students' engagement in school	https://www.buyplaya.co/playal ife/playalife-blog/playa-del- carmen-summer-camps-2019/
	PTS helped me gain digital literacy skills	Mex\$399 Cost of attending digital literacy course	An alternative way for students to gain digital literacy skills is by taking a digital literacy course. Cost for one course is Mex\$399.	https://edutec.mx/
1.6 Improved prospects for	PTS helped me obtain skills that in turn increases my	Mex\$143	In Mexico, government institutions certified skills	https://conocer.gob.mx/pregunt as-frecuentes/

	employment	employability	Cost of certification of competence	(CONOCER) for the individual who wants to obtain certificates that can be used to apply for a job. Fees vary depending on the competency standard.	https://conocer.gob.mx/contenid o/templates/conocer/redconocer /normatividad/Cedula_Cuotas_ Ejercicio_2020.pdf
		PTS provides me with career counseling	Mex\$522 per student Cost of vocational psychology	This online psychology offers to help students in decision- making for academic and career choice. We assume the consultation only happens once per year.	https://www.capi.com.mx/html/ psicologos-df-especialidades- orientacion-vocacional-para- adolescetes-desicion-de-toma- de-carrera.php https://www.capi.com.mx/blog/ producto/programa-de- orientacion-psicologica-en- linea-pol/
		PTS helped me increase my work productivity	Mex\$3,468 per student Cost of a course for strengthening soft skills or team building	Team building is an alternative way to increase work productivity. One time cost Mex\$2,990+VAT 16%	https://www.grupocapacitador.c om.mx/cursos-2021/desarrollo- humano/formacion-de-equipos- autodirigidos/
School	2.1 Improved teaching practice	Higher motivation among teachers/improved teachers' dedication to classes	Mex\$1,000 per teacher Cost of Continuing Training Program for Teachers (PRODEP)	An alternative way for teachers to improve their motivation/dedication skills is by taking a training course	Page 30 https://www.inee.edu.mx/wp- content/uploads/2018/12/P1F22 <u>6.pdf</u>
		Enhanced teachers' ability to deliver effective curriculum	Mex\$4,600 per teacher Cost of accredited teacher training on pedagogical training	An alternative way for teachers to improve their teaching skills is by taking a pedagogical training course	http://www.pontificia.edu.mx/e xtension/oferta- educativa/cursos-en- linea/formacion-pedagogica/
	2.2 Improved School Discipline	Decreased amount of disciplinarian write-ups/actions against students	Mex\$192 per student per year Cost savings from working for administrative actions	The average salary cost for administrative assistants in TVET public school in Mexico is Mex\$15,629 per month or Mex\$96 per hour. Assume they put an average 2 hour work time to do the	Administrative staff salary (Plantilla Administrativa Enero 2020) http://transparencia.esonora.gob .mx/Sonora/Transparencia/Pode r+Ejecutivo/Entidades/CONAL EP+Sonora/Hist%C3%B3rico/

				administrative actions per student per year.	Remuneraciones/
		Lower teacher absenteeism and turnover	Mex\$1000 per teacher Cost of Continuing Training Program for Teachers (PRODEP)	Cost of professional development course for raising professionalism and discipline among teachers.	Page 30 https://www.inee.edu.mx/wp- content/uploads/2018/12/P1F22 6.pdf
	2.3 Developed positive connections for schools and teachers	Ties of trust between peers, teachers, and parents as it is a comprehensive program	Mex\$372,000 per school per year Cost of communications and outreach to parents	An outreach specialist can help in developing positive connections for schools with students and parents. Outreach Specialist average salary in Mexico Mex\$372,000 per school per year	http://www.salaryexplorer.com/ salary- survey.php?loc=139&loctype=1 &job=12577&jobtype=3
	2.4 Improved interpersonal skills of trained teachers	Improved teachers' communication skills and conflict resolution skills both at school and at home with their families	Mex\$1,000 per teacher Cost of Continuing Training Program for Teachers (PRODEP)	An alternative way for teachers to improve their interpersonal skills is by taking a pedagogical training course	Page 30 https://www.inee.edu.mx/wp- content/uploads/2018/12/P1F22 6.pdf
	2.5 Improved image and quality of the school in the neighborhood	Improved the image and quality of the school in the neighborhood	Mex\$23,461 Cost of quality assurance for schools	One of the quality assurance of conalep is educational accreditation granted by CACECA. The cost of such quality assurance \$117,305 for 5 year	KII with IYF staff For value: Page 5 http://transparencia.esonora.gob .mx/NR/rdonlyres/AFED2223- D1F3-4C76-A574- 31AB1BA432E3/344485/CON TRATOCACECA2018.pdf
Community	3.1 Improved perceptions of young people coming out of TVET schools	Improved perceptions of young people coming out of TVET schools	Mex\$48,000 Per year Expenditure of government on promotional and goodwill activities for TVET public schools (radio or newspaper commercials and alike)	Mex\$4000 per print ad Say 12 print ads per year = 4000*12 = 48000 Mex\$ Promotional activities could be an alternative way to improve image in the community	https://thirdsectorimpact.eu/site/ assets/uploads/documentations/t si-working-paper-no-6-meta- analysis-of-sroi-studies- indicators-and- proxies/TSI_WP6_SROI_Impa ct1.pdf https://www.gaebler.com/KXE

					O-AM-MO-Radio-Advertising- Costs++18234
	3.2 Lower number of young people getting involved in dangerous or criminal activities	Lesser youth getting involved in dangerous or criminal activities	Mex\$39,090 Cost-saving on economic cost of violence per offender per year	Total economic cost of violence in Mexico in 2018 is 5.16 trillion Mex\$. Total crimes in Mexico in 2018 are 33 million. Per crime cost is 156,363. This includes the direct, indirect, and multiplier costs of violence. Mex\$156,363 per crime in 2018 Assume 4 people are involved in 1 crime. Cost would be Mex\$39,090 per offender	https://www.visionofhumanity. org/mexico-suffers-most- violent-year-on-record-at-a- cost-of-268- billion/#:~:text=The%20econo mic%20impact%20of%20viole nce,cent%20of%20the%20econ omic%20impact.https://www.inegi.org.mx/ https://www.economicsandpeac e.org/wp- content/uploads/2020/08/ENG- MPI-2020-web.pdf (Pg 36)
	3.3 Increased number of jobs for teachers/facilitator/tu tors/staff which are required to support the program	Increased number of jobs for teachers/facilitator/tutor/staff which are required to support the program	Mex\$129,331 Multiplier effect on the economy due to higher incomes and consumption <u>over 2 years</u> per job created	Assume average teacher and staff salary in Mexico is Mex\$267,500 per year (Teachers 334,000 + Staff 201,000/2 = Mex\$267,500 per year) Income tax rate is 15% on average for this salary range, Average household savings rate in Mexico in 2019 is 21% Consumption expenditure = 267,500 - taxes - savings = 179,626 Multiplier effect = Consumption expenditure* Mexico Fiscal multiplier (two-year cumulative multiplier) = 179626* 0.72	For salaries: http://www.salaryexplorer.com/ salary- survey.php?loc=139&loctype=1 &job=5843&jobtype=3 http://www.salaryexplorer.com/ salary- survey.php?loc=139&loctype=1 &job=13&jobtype=3#:~:text=H ow%20much%20money%20do es%20an%20Administrative%2 OAssistant%20make%20in%20 Mexico%3F&text=A%20perso n%20working%20as%20an,%2 C%20transport%2C%20and%2 Oother%20benefits. For household savings rate: https://tradingeconomics.com/m exico/personal-savings For tax rates:

		= 129331	https://taxsummaries.pwc.com/ mexico/individual/taxes-on- personal-income
			For fiscal multiplier: https://www.imf.org/en/Publicat ions/WP/Issues/2020/01/31/Ho w-Big-are-Fiscal-Multipliers- in-Latin-America- 48959#:~:text=IMF%20Workin g%20Papers&text=With%20the se%20results%2C%20it%20co mputes.than%20the%20cumulat ive%20spending%20one

Funding type	Stakeholder	Calculation	Year 1	Expenses
Monetary	IYF Donors	The average cost of PTS implementation per school US\$52,500. However, there was a one-time license fee cost of US\$5,000, which covered five years of operations or US\$1,000 per year. We adjusted the cost accordingly to US\$48,500 for one year. We used the exchange rate from Banco de Mexico as of April 16, 2021, of 19.92 Converted the cost to Mex\$: 966,120 Multiply with total schools running PTS in Mexico: 66*966,120 = Mex\$63,763,920	63,763,920	PTS Core Support Services, Management Fee, License Fee, Taxes
	Assume schools provided the printing materials for three modules with an average of 30 pages for each student per semester. Each page cost Mex\$0.25. So for each student, it cost Mex\$22.5 for the printing materials.		717,345	Printing modules for PTS program
Non-monetary	Assuming a teacher put in 1 extra hour per week to prepare for the PTS lesson and taking Mex\$104 as the hourly wage rate.Mex\$ 5,512 per teacher per year		914,992	Teacher salary time
Total Inputs		65,396,257		

Appendix G: Inputs Calculation