

# Transforming Vocational Education in Palestine by Integrating 21st Century Skills

## Effects, Challenges and Opportunities

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*In Palestine, youth unemployment rates are rising, vocational training centers (VTCs) are not teaching students the skills needed to survive in the 21st century workforce, and females are extremely underrepresented in both VTC institutions and the labor force. This study reports on the effectiveness of a set of interventions meant to transform VTCs with new life skills training, improved training practices, and expanded career guidance services that will encourage females to participate fully in the workforce. A sample of 64 students receiving the set of interventions completed an 11-item retrospective pre-post life skills training survey. Both females and males reported positive shifts on all 11 items, with an average 24% improvement across all items, and 48% of graduates reported finding employment three months after graduation. Anecdotal reports suggest opportunities for females are growing, and that VTCs are well placed to continue working to address gender inequities.*

**Keywords:** life skills, vocational training, Palestine, employment

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## INTRODUCTION

**Y**outh employment is a serious problem in many countries in spite of global attention to the issue (International Labour Organization, 2016; O'Higgins, 2017). According to the International Labour Organization, global youth employment declined by 34 million between 2019 and 2020, and most of the loss resulted from the extraordinary circumstances of the COVID-19 crisis (International Labour Organization, 2022). In West Bank and Gaza, with one of the youngest populations in the world and youth aged 15 to 24 making up nearly 35% of the working age population, youth unemployment is particularly pressing (International Labour Organization, 2021). According to the Palestinian Central Bureau of Statistics, the unemployment rate in 2019 among youth (18–29 years) in Palestine reached 31%–38% among males and 63% among females, with 63% of the unemployed from the Gaza Strip and 23% from the West Bank. Further, in 2020 only 16% of working-age women were in the labor force. (Palestinian Central Bureau of Statistics, 2020).

One important reason for high unemployment is that young people are not properly equipped with the right soft and technical skills to meet the demands of the 21st century labor market (Bergin, 2019). These include soft skills such as higher-order thinking and interpersonal development (see e.g., Figure 1) and technical skills such as computer knowledge and understanding the green economy. Vocational Training Centers (VTCs) are well-positioned to help meet labor market demands. However, in many lower middle income countries, including Palestine, essential employment support services, such as career guidance and life skills training, are absent (Belgian Development Agency, 2016). Further, in West Bank and Gaza, enrollment in vocational training suffers from a large gender gap. According to the Palestinian Ministry of Labor, 31% of VTC enrollees were female compared with 69% males. Although the reasons for the gender gap in Palestine are not well-documented in the published literature, they are likely to be found in research on other regions and would include elements such as parental and peer influence (Mohamed, 2022), domestic responsibilities, safety concerns, and factors affecting what is considered culturally appropriate for females and female students' interests (Khan, et al., 2017). In Palestine, VTCs are mostly located in major cities, and young women may have difficulty reaching them due to political barriers and security measures. In addition, the specialties available respectively to males and females in Palestine are restricted, with those for women



**Figure 1.** IYF's Life Skills Framework

concentrated in gender-traditional fields such as retail and service industries and professions such as seamstress, cosmetologist, and secretary. The lack of career guidance and attention to gender norms has contributed to females' reluctance to engage in new disciplines suited to the changes and opportunities of the times (Awad, 2022).

The Palestinian context is particularly challenging for young people who are considering their futures and economic opportunities. Challenges include significant constraints to navigating the local labor market, extreme economic inequality within a small geographic area, rigid traditional gender norms, and frequent exposure to trauma and violence, to name just a few (Hilal & McGrath, 2016; Nasir, 2022). Within this context Hilal and McGrath (2016) argue that "it makes no sense to talk the conventional VET (vocational education and training) language about youth employability. Rather, the case forces us to explore how VET addresses key issues that are relevant far beyond Palestine: social justice, inequality and the achievement of economic and social rights" (pg. 88). Life skills integrated into vocational training can help prepare young people, in particular young women, to address these key issues.

Life skills, also known as soft skills and 21st century skills, have received widespread attention as one promising method to better prepare young people in vocational training programs (Prajapati, et al., 2016). Life skills are foundational behaviors and attitudes known to be positively linked to important life outcomes including academic achievement,

employment, and civic responsibility (Heckman, et al., 2006; International Youth Foundation, 20220a). One conceptualization of these skills is found in IYF's Life Skills Framework in Figure 1 (International Youth Foundation, 2020b). This framework divides skills into four domains: Positive mindset, higher order thinking skills, community mindset, and interpersonal skills. This framework guides life skills interventions introduced globally by IYF.

IYF designed the EquipYouth (EY) program with funds from the Caterpillar Foundation specifically to address shortfalls in employability and career training services in Palestine. This would be accomplished by building a bridge between existing VTC training programs and labor market needs, with a particular focus on attracting young women to vocational training. Beginning in 2015, EY worked with the Ministry of Labor to integrate life skills and career guidance as part of the standard curricula to help young women and men identify their career paths and build their skills. To this end, EY was designed to equip teachers and staff with knowledge, skills, and attitudes so they would be better able to provide students the soft and practical skills needed to more successfully transition and compete in the labor market.

Although research has firmly established the importance of life skills for youth work and life preparedness, no research has documented the successful integration of life skills into vocational training systems in Palestine, nor does research exist establishing that such integration improves students' 21st century skills. This paper contributes to addressing this gap.

This paper addresses the following two study questions: 1) Can life skills be integrated into VTCs in West Bank and Gaza? 2) Do VTC students who have received life skills training subsequently report improved life skills? We also explore whether students gain greater understanding of available professional options, in particular gender nontraditional choices, after receiving career guidance.

## METHODS

### Design

A single group, cross-sectional research design was used to answer the study questions using a quantitative youth-facing survey, supplemented with open-ended qualitative questions to provide context and richness. In addition, evidence of systems change was collected by program staff as part of the ongoing work of program implementation and reporting.

## Intervention

To meet the identified gaps in graduates' life skills and career preparedness, in partnership with Palestinian Charity for Youth Economic Empowerment (CYEE), a local implementing partner, EY implemented a comprehensive set of capacity strengthening activities using two evidence-based curricula: Passport to Success (PTS) life skills curriculum and My Career My Future (MCMF) career guidance curriculum, and wrap-around support activities such as gender awareness campaigns. The PTS life skills curriculum included positive mindset (e.g. self-confidence), higher order thinking (e.g., critical thinking), interpersonal skills (e.g., communication) and community mindset (e.g., empathy). MCMF covered five competencies: career guidance theory and practice, helping and facilitation skills, labor market information and resources, career services management, and employability skills, all designed to improve an institution's ability to provide comprehensive career guidance and students' abilities to make the best career choices.

EY trained 32 VTC teachers in West Bank and 49 in Gaza in PTS and MCMF and instructed 40 VTC instructors in digital technology for virtual learning to accommodate COVID-19 restrictions. In addition, 24 teachers attended five gender awareness workshops. Trained teachers then equipped 1,070 VTC students with PTS and MCMF, which were integrated into students' technical training, and held 53 gender awareness sessions for 700 youth.

Trained VTC staff implemented the EY interventions during the VTC's school year. Students received at least 24 hours of PTS life skills training and employability programming over the course of one full academic year at a frequency of approximately one lesson per week. Students also received at least six hours of MCMF, including training modules and one-on-one career counseling sessions.

To support the PTS and MCMF training, EY held a gender awareness campaign aimed to reach more than 2,000 young people, as well as educators, employers and community members. The campaign included gender awareness workshops, posters developed for gender equality, short recorded messages on gender equality by young men and women, activities focused on female career guest speakers, roundtables, panel discussions, and other workshops delivered to youth, VTC staff and employers. Messages focused on changing the social images of gender roles, encouraging men and women to contribute in the labor market, and on highlighting advantages of participation in VTCs. CYEE trained a team of youth volunteers in

Palestine to support the gender awareness campaign, especially in disseminating the promotional materials, posters, and videos. These volunteers provided services from June 2020 to May 2021.

In addition to the VTC-level interventions, EY staff supported the General Directorate (GD) of Vocational Training in Gaza to integrate PTS into their standard curriculum. This consisted of working with the GD to ensure the curriculum was aligned with the directorate's priorities and current strategies.

#### **Institutional Selection**

EY targeted VTCs that provided one-year training on specific vocational topics, such as mechanics, secretarial work and graphic design, to prepare graduates for employment. All public training centers registered at the Ministry of Labor in West Bank and Gaza were included in EY<sup>1</sup>, in addition to three well-known private VTCs run by YWCA, YMCA, and Lutheran World Federation.

#### **Sample Selection and Data Collection**

CYEE trained a team of youth volunteers to assist students individually to complete surveys and to collect data from VTCs in the West Bank and Gaza. CYEE orientated volunteers about EY and trained them to administer the survey, respecting respondents' rights.

A random sample of students who participated in the year-long VTC training area of their choice and completed at least 70% of requirements for graduation were selected from program records. Trained youth volunteers contacted the randomly selected students by phone approximately three months post-graduation and asked them to participate in the survey. This meant that students selected had completed at least 24 hours (i.e., 24 sessions) of PTS. Youth volunteers did phone interviews of students who agreed to participate.

#### **Survey**

The survey, administered in Arabic, consisted of two sections: background information and a short retrospective life skills survey used previously by IYF in multiple programs in Palestine and elsewhere. Background information collected included age, gender, site, and VCT training course selection.

The retrospective life skills survey consisted of 11 statements reflecting the respondent's perception of his or her personal skills (e.g., I have

the personal skills—such as communication, ability to work with others, problem solving, self-presentation—I need to have a successful career or business). Respondents were asked to rate their skills on a 5-point Likert scale from strongly disagree (1) to strongly agree (5). Respondents rated each item twice, once in relation to their perceived skills before the life skills intervention, and once reflecting their perceived skills after the life skills intervention. Items were originally designed by IYF to reflect the range of soft skills targeted in IYF's PTS curriculum.

## RESULTS

### Sample Demographic Characteristics

Demographic characteristics of the 64 young people from the West Bank who agreed to participate in the study are found in Table 1. Respondents were on average 21.7 years of age. Nearly three in four respondents were female (73%) and living in the city (72%), which reflected well the demographics of the of the EY project. Respondents were receiving training in one of four technical areas: Mechanical (28%), secretariat (26%), graphic (25%) and electronic sales and marketing (21%). Note that all of the respondents in the mechanical training group were male, and those in the remaining three training groups were female.

**Table 1.** Youth Demographic Information

Characteristic	Percent/mean (N = 64)
% female	73% (n = 47)
% living in the city	72% (n = 46)
% living in villages	28% (n = 18)
mean age	21.7
% in technical training area	
- Mechanic	28% (17)
- Secretariat	26% (16)
- Graphic	25% (15)
- Electronic sales, marketing	21% (13)

### Life Skills Scale Reliability

Cronbach's alphas were calculated separately for the pre- and post-test versions of the 11-item life skills scale. Cronbach's alpha statistics were found to be acceptable at 0.769 for the pre-test items and 0.787 for the post-test items (Taber, 2017).

Change in Life Skills

Average ratings improved for all 11 life skills statements, from 15.5% to 32.9% improvement (see Table 2). Across the 11 life skills statements, respondents rated the average perceived life skills before the intervention as 3.35 out of 5, and after the intervention average perceived life skills increased to 4.17, an average increase across the 11 items of 24.7%.

Students reported the largest improvements in creativity and communication skills—both more than 30% improvement—and the least in resolving conflicts and believing there were many opportunities to achieve their career—both less than 17% improvement.

**Table 2.** Retrospective Life Skills Scores

Life Skills Survey Item	Pre-test mean score	Post-test mean score	% change
I have the creativity skills I need to have a successful career and business.	3.13	4.16	32.9%
After completing the training, I have the communication skills—verbally, written, and listening—I need to succeed in the workplace.	3.30	4.30	30.5%
I understand the rules and expectations in interacting with others and am able to interact with others in a harmonious manner.	3.20	4.14	29.3%
I believe I work well in a team.	3.25	4.15	27.5%
I have the personal skills—such as communication, ability to work with others, problem solving, self-presentation—I need to have a successful career or business.	3.41	4.33	27.2%
I believe I have a good future ahead of me.	3.29	4.17	27.1%
I have a good understanding of the job readiness skills to secure and maintain work.	3.33	4.08	22.4%
I believe I can contribute to my community and/or society	3.39	4.14	22.3%
I have the technical or vocational skills I need to secure and maintain work.	3.42	4.11	20.3%
I have a good understanding of conflict resolution and problem-solving skills to secure and maintain work.	3.51	4.08	16.4%
I believe there are many opportunities to achieve my career goals.	3.59	4.14	15.5%
Overall Average	3.35	4.17	24.7%



## Employment

Within six months of graduation from the vocational training centers, 48% of graduates had obtained employment. Of the graduates working, 78% reported that their income was not sufficient to provide for their needs, and 22% reported that their income was sufficient.

## SYSTEMS CHANGE OUTCOMES

In addition to individual-level student outcomes, project staff also supported and witnessed changes at the systems level. Working with the GD in Gaza, VTCs' administration officially integrated a comprehensive course of life skills and career guidance into their program plans where none existed before, naming the course "Professional Culture," and making it a requirement for graduation for all students of the Gaza VTCs. Internal human resource capacity to sustain the change was also established by the program: Nine staff members in the Ministry of Labor and the GD were designated PTS champions, committed to keeping and supporting life skills training in the VTCs. These changes at the systems level were successfully supported by the project to scale and sustain the introduced life skills curriculum.

## DISCUSSION

Can life skills be integrated into Vocational and Training Centers in West Bank and Gaza?

This study shows that life skills and career guidance services can be integrated well into VTCs in Palestine as part of ongoing technical instruction. EY interventions were well accepted by educators and students, both male and female, at local level and by policy makers and champions at national level and were valued for their role in preparing students in a better way for the current workforce.

Unemployment is one of the most serious problems Palestinian youth face in West Bank and Gaza. A gap between the skills required by employers and possessed by graduates is one of the key factors affecting unemployment. In such situations, it is important to ensure life and career skills are embedded by educational institutions, especially regarding technical and vocational education, since they provide a semi-skilled and skilled workforce to compete in the labor market.

Gaps that exist between employer requirements and skills possessed by graduates or job seekers are a concern consistently raised around the world (Reese, 2018). Reports tracking unemployment rates, particularly disaggregated by gender, also prove that the issue of unemployment needs to be seriously addressed with regard to the future workforce (see, for example, Awad, 2022). The real problem is that employers find it difficult to find workers—male or female—who have the skills or job readiness to fit into and remain in the work environment. Students studying in VTCs in Palestine hope and expect that they will obtain a suitable job upon graduation. This may come true if, during learning, students are nurtured with life and career skills that enable future work survival. By successfully integrating life skills and career guidance into VTCs, both students and VTCs will benefit when graduates become employed and are in demand by employers. Therefore, to produce a 21st century workforce, educational institutions must thoroughly understand current skill requirements, especially life and career skills, and subsequently nurture them to produce a workforce that meets employers' demands.

**Systems Change.** Beyond just being accepted and implemented, the new materials were valued for their ability to transform the educational experience. For example, the director of the YMCA VTC said “The shortest way to develop societies is to involve men and women equally. Thus, we created an atmosphere of intimacy within the center; as well we created educational programs that enhance and encourage the participation of women in the labor market. Those programs are always in constant development and change.”

Changing the system was not an original goal of the EY project. However, during implementation, EY staff realized that what they were doing—adding life skills training and career guidance to the standard VTC offerings—was embraced by both students and educators and eventually was considered important enough by Gaza VTC administration to become a course required by all students, a course they called Professional Culture. Professional Culture included life skills and career guidance, and became an ongoing part of program plans and budgets, implemented independently from EY funding. Through this transformative system change, Professional Culture has the potential to reach tens of thousands of young women and men in the future. This is particularly critical in Gaza where the need for life skills training among young people is increasing as a result of the pandemic, and as youth are experiencing higher depression and suicide rates.

However, a changed VTC system is not sufficient if cultural attitudes toward VTCs don't also change. As in other parts of the world (Aryeetey, et al., 2011; Khan et al., 2017), vocational training for many Palestinians is not considered higher education; it is not perceived as a useful endeavor that would give students meaningful work opportunities or social prestige; and it is seen as an educational opportunity for students with poor achievements and performance (Helle, 2022).

Do VTC students receiving life skills trainings report improved life skills after the training?

Beyond success in integrating life skills and career guidance into VTCs, this study found that students learned the life skills that are now a standard feature of the curriculum. Students reported substantial overall gains in life skills after the PTS intervention—nearly 25% improvement overall—and a positive shift in each of the 11 items, indicating the effectiveness of the training they received. Anecdotal reports from students confirm the usefulness of the training. One student reported that “the best PTS lessons that I enjoyed the most were related to searching for jobs, writing effective CVs, and interview skills. Additionally, I learned new skills on ways to communicate, establish networks, handle responsibility, and strengthen my self-esteem.” Another student from the YMCA VTC reported that “I always hear ‘why did you join the vocational training sector while there are many other available specializations at the university you could join?’ Today, and through my experience at the vocational field I’m here to tell you I was able to discover myself, acquire new skills, and develop my capacity. Now, I’m sure I can compete in the labor market.”

Living in the 21st century requires young people to have current skills, especially VTC students who think that, ideally, they will be employed upon graduation. If so, students should take the initiative to enhance and learn skills needed to be employed. Having the requisite life and career skills expands opportunities for youth to gain employment. Life and career skills are what most employers consider employability factors but from a broader perspective. They cater to more than employability and include soft, technical, and academic skills essential to survive in the 21st century. Students should be appropriately equipped to survive in the real working environment. From this work we can see that by embedding life and career skills within the curriculum in each program offered, VTCs students in Palestine can be physically and mentally prepared for the 21st century workforce (Nasir, 2022).

Though the study was not able to assess how students used life skills in their new jobs, we do have some anecdotal evidence. For example one student studying cosmetics in the Imam Al-Shafie VTC reported that “this project allowed me to gain new skills that helped me to successfully market myself to enter the online commerce industry and to better manage my work, as well as assisted me in dealing with the troubles I face during work, especially with customers.” Future studies should be designed to systematically assess how students actually use their life skills training in their new jobs and businesses in Palestine—both from the perspective of graduates and employers—to provide information about how to make interventions even more effective.

#### Do Students Have Expanded Understanding of Professional Choices Open to Them, Particularly Gender Nontraditional Choices, After Receiving Career Guidance?

Ideally, this study would have used gender data on changing course enrollment patterns in the VTCs to assess which EY interventions most influenced perceived career choices by young women and men. However, these data were not available during the course of the study.

Anecdotally, educators and project staff reported individual successes, such as this reported by a female VTC student:

When you believe in yourself, when you follow your passion, and when you have extraordinary opportunities to learn new skills like the ones I have learnt from the PTS courses, you can easily challenge the status quo and break the boundaries of what you have been told must be . . .

This optimistic statement obscures the significant challenge of overcoming cultural expectations, particularly in a society with strong and consistent separation of gender roles (Amireh, 2022; Hilal & McGrath, 2016; Khan, et al., 2017). Students enrolled in the specializations available at the VTCs suffered from the stereotypical image of the vocational and technical education, which causes a gender gap between men and women enrolled in these centers. Women face a double pressure in the educational process because of the limited specializations available to them as compared with men. Gender segregation in the vocational orientation of adolescents has been a real problem for decades. The persistence of horizontal gender segregation in vocational and technical fields contributes decisively to the spread of gender-stereotypical beliefs about a natural fit of women in careers in more expressive and human-centered fields and men in technical-intensive fields. The social role theory (Eagly & Wood,

2011) suggests that gender roles are highly visible in everyday contexts and that gender stereotypes emerge in response to the observation of women and men in different social roles and in role-linked activities related to occupational choices.

We believe VTCs are well-placed to take on gender stereotypes and broaden students' conceptualization of appropriate and available careers in spite of recent TVET gender assessment findings that gender-responsive national policies and regulations are lacking in Palestine (USAID, 2022). VTCs need to implement activities for the sake of creating this change through gender awareness and mainstreaming campaigns, such as those implemented in EY, focusing on increasing awareness of gender issues in Palestinian vocational workplaces, and increasing young women's awareness of career pathways and access to the labor market within the vocational sector. Again, these changes appear to be emerging, along with a deeper understanding of reforms needed to support increased female enrollment in vocational training and the role well-designed career guidance can play in youth transitions to the workplace (Khan et al., 2017; Sultana, 2017). Significantly, the Vocational Training Directorate in the MOL reported that "There are some positive indicators that reflect a social change in the perceptions of people towards vocational training, especially women's participation in non-traditional programs through vocational training centers. I believe that's the willingness of the young women with the support of their families to join non-traditional programs and professions." We are hopeful that similar and sustained efforts within VTCs will continue to push the needle on opening up non-traditional course choices for both young women and men.

**Employment Outcomes.** General unemployment in West Bank and Gaza reached 32.5% in 2021, the highest ever, with youth unemployment even higher (40.2%) (International Labour Organization, 2021). Despite the combined blows in Palestine of the pandemic and the war, we were delighted that graduates' employment rates exceeded the original target of 40%, with 48% of program graduates securing a job at least six months after program completion. This effectively reflects the reality of the labor market's need for labor and craftsmen, and we hope also reflects improved alignment between employers' needs and graduates' skills.

However, from the data, we assume that the pandemic and broader economic conditions adversely impacted the salaries of the employed youth, because 78% of those working reported that their income was not sufficient. The private sector environment can be difficult for women to navigate

because of both poor management and working conditions, and poor pay especially for women, with MOL's labor laws sometimes ignored or unenforced (USAID, 2022). Though the factors influencing this fall outside the current study, VTCs may be able to work closely with private sector partners to advocate for more acceptable salaries for graduates and respect for laws and regulations to protect women.

We did find that for some individuals salaries were both sufficient and critical to the whole family within a dire economic context. For example, one student reported that "Although the most recent aggression in Gaza has partially destroyed my family's house, I was able to financially cover the expenses required for maintenance. My earnings are now the main source of income for my family."

## RECOMMENDATIONS

It is necessary to point out the central role of policy and decision makers to change the stereotype about vocational training in Palestine in general so that vocational education and training becomes an attractive sector for both males and females rather than a station for unlucky young people in the areas of formal education in Palestine. Therefore, we believe there is an urgent need to develop the vocational training sector specifically in terms of infrastructure and programs; training curricula should be developed to simulate modern technological developments, life skills and career guidance programs should be integrated within VTCs' programs' plans, and a cadre of trainers should be equipped with the skills to fully transfer knowledge to students. What we aspire to in the field of vocational training is to provide equally available specialties for both males and females and to find girls joining training programs, for example, in the fields of automotive mechanics, electricity, and electrical appliance maintenance in the latest educational programs.

## LIMITATIONS

The EY study had several limitations. First, there were limited resources for data collection because the work was funded as an implementation program rather than research. Therefore, the amount and type of data—both background and outcome—were narrow. Information from a wider range of participants—even employers—and geographies over a longer period of time, and including a wider range of variables and a

systematic qualitative study component, would be very useful. In particular, a more systematic understanding of any changes in females' and males' perceived vocational choices, and why those changes occurred, would be useful. Being able to capture effects beyond the COVID-19 period would also be helpful to determine whether effects would be either greater or less.

This study applied a retrospective pre-post assessment of life skills rather than assessing life skills at two moments in time: before and after the intervention. The technique is debatable because respondents may report exaggerated changes, but does allow respondents to reflect on the amount of change with greater insight into the construct—in this case the construct of life skills with which youth may not have been familiar in advance—than with the traditional pre-post test design (see for example Little et al., 2020).

## CONCLUSION

This study was successful in both integrating life skills and career guidance into VTCs, making it a new required course for graduation in Gaza, and had observable positive effects on graduates' reported life skills, for both young women and men. Though we did not see systematic changes in non-traditional course choices for females, we did see promising trends in that direction, and believe that VTCs can continue to transform vocational education and training for women in Palestine.

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## Notes

1. In the West Bank: Beit Jalla; Halhoul, Hebron; Yatta, Hebron; Hebron City; Beit Ur, Ramallah; Jenin; Salfeet; Tulkarem; Qalqilia; Nablus; and Jericho. In Gaza: Gaza City; North Area; KhanYounis; Rafah; and Deir Al-Balah.



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