UPGRADING INFORMAL APPRENTICESHIPS: A BOTTOM-UP APPROACH

In developed economies, formal apprenticeship systems have been proven to ease young people’s transitions from school to work. In most informal economies, meanwhile, informal apprenticeships remain the chief mode of skills transfer for young workers. In these informal systems, young learners or apprentices acquire the skills for a specific trade in a micro or small business by learning and working side-by-side with an experienced craftsperson. These apprenticeships are based on an informal agreement embedded in local norms and traditions, rather than on a contractual relationship, leaving room for misunderstandings and low standards.

International Labour Organization (ILO) interventions in Africa have demonstrated that well-designed approaches can enhance informal apprenticeship practices by introducing improvements and upgrades negotiated between the master craftsperson, the apprentice and a vocational training centre. Projects that were piloted in Jordan, Egypt and Tunisia in 2013 serve as a basis for Arab version of this approach.

This report summarizes the findings and results from the Jordan pilot carried out between April 2013 and March 2014. The pilot was conducted by the ILO in collaboration with the International Youth Foundation (IYF) as part of EquipYouth, a youth employability programme implemented by IYF and funded by the Caterpillar Foundation. The pilot is also a part of the Swiss International Development Agency’s (SIDA) funded project “Tripartite Action for Youth Employment in Jordan”, implemented by ILO within the framework of the ILO Decent Work Country Programme (DWCP).

PROGRAMME DESIGN AND METHODOLOGY

Initial rapid assessment. To inform the design of the present pilot programme, the ILO drew from results of an earlier rapid assessment of two sectors with active informal apprenticeship systems, automotive repair and printing1. Approximately 300 master craftspersons, employers, skilled workers, and apprentice in some 150 vehicle repair and printing small and micro businesses were interviewed in Amman, Zarqa, and Irbid. These three governorates were selected because they account for 71% of the population in Jordan (Department of Statistics 2013) and the greatest concentration of garages and printing workshops in Jordan3. The study revealed that the apprentice’s skills acquisition, occupational health and safety standards, work organisation and workplace management, and engagement of young women in non-traditional occupations all need improvement; and more awareness of child labour laws is needed.

3 National Center for Human Resource Development (NCHRD) study on supply and demand of human resources in Auto Repair sector, 2014
The pilot programme was designed to address needs in the informal apprenticeship practices reported by interviewees in the rapid assessment. In general, they described a largely unstructured, unbenchmarked apprenticeship system without formal recruitment practices, training plans or agreements, and ambiguous performance targets. Most apprentices were working in very small businesses with a small staff, very small number of apprentices and seasonal or irregular activity. There was no record available on accidents and absences, but based on direct observations by OSH specialists, the apprentices were exposed to a high level of risk. At the same time, the incidence of child labour was high, especially in garages.

**Comprehensive, Sector-Specific Employability Training.** The pilot initiative to upgrade informal apprenticeships in Jordan was implemented in 31 garages. The initiative aimed at (a) developing the apprenticeship model and process, (b) linking apprentices with employers for on-the-job training, (c) improving the occupational health and safety conditions at the workplace, (d) improving the work organization and workplace management, and (e) organizing testing for occupational licenses of the apprentice.

The programme included two main phases: six months of basic training followed by three to five months of on-the-job training. The basic training phase included a combined package of technical and workplace core skills training include life skills, basic business English, and IT courses, provided through IYF's *EquipYouth* programme. Participants also received occupational safety and health training. Please see the table below for more details about the content of the training.

After completing the basic training, each participant was assigned to a garage as an apprentice. During their on-the-job training, apprentices received transportation allowance, insurance against work-related injuries, and a work uniform. They were also invited to take free of charge the test for an occupational license at the end of the programme, and competed with other apprentices for awards.

**Table 1.** Components of the basic training package

<table>
<thead>
<tr>
<th>Topic</th>
<th>Objective</th>
<th>Light vehicle repair</th>
<th>Quick services for trucks / buses</th>
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<tbody>
<tr>
<td><strong>Workplace Core Skills Training</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English language skills</td>
<td>To be familiar with terms for auto repair.</td>
<td>30 training hours</td>
<td>15 training hours</td>
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<tr>
<td><em>IYF Passport to Success® (PTS)</em></td>
<td>To develop knowledge and behavioural skills in four key areas: personal development, problem solving, healthy lifestyles and workplace success.</td>
<td>48 training hours</td>
<td>48 training hours</td>
</tr>
<tr>
<td>Basic occupational safety and health (OSH) awareness</td>
<td>To identify safety and health hazards in the workplace and how to protect oneself.</td>
<td>24 training hours</td>
<td>10 training hours</td>
</tr>
<tr>
<td>Basic computer skills</td>
<td>To source information and organize knowledge.</td>
<td>30 training hours</td>
<td>15 training hours</td>
</tr>
<tr>
<td><strong>Technical Skills Training</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical skills</td>
<td>To get hands-on experience in light vehicle</td>
<td>300 hours</td>
<td>150 hours (2/3)</td>
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</table>
repair or quick service for trucks and buses. (2/3 practical)

In total, 70 apprentices ages 18 to 27 benefited from this programme. Fifty-five of them (76%) completed both phases; 16 (23%) opted for a two-week internship instead. Of the 53 apprentices, 18 (34%) had community college diplomas, 18 (34%) had secondary school diplomas, 10 (19%) had completed 10th grade (basic education), 6 (11%) were Vocational Training Corporation (VTC) graduates and one (2%) was an UNRWA vocational training graduate. Forty-one (77%) of the apprentices were trained in light vehicle repair and 12 (23%) in quick service for trucks and buses.

The 53 apprentices were trained at 31 garages and small auto repair workshops, whose owners participated in the pilot programme as well.

Mentoring at the Core of the Apprenticeship. Three mentors (also known as field advisors) were responsible for monitoring apprentices through weekly field visits to their workplaces. The mentors tracked apprentices’ skills acquisition using score cards and logbooks which were first filled out by the apprentice as self-assessment, then validated by the master craftsperson and by the mentor. These score cards were developed using simple competency profiles based on the Arab Standards for Classification of Occupations (ASCO 2008). The mentors also played the role of mediator with apprentices, master craftspersons and even parents, in order to limit programme drop-out.

Engaging Employers to Improve Working Conditions. To address the workplace issues highlighted in the rapid assessment, the programme worked directly with employers, offering two types of professional consultations with an OSH expert and a business consultant, who visited the garages, conducted evaluations and offered coaching to help them run their garages more safely and efficiently. The OSH expert agreed upon a list of required improvements with the garage owners and monitored their progress in follow-up visits. The business consultant evaluated their workplace management and provided coaching on to improve their work4. The main areas of improvement included providing technical information to the client and correct billing. To incentivize them to participate in the programme and help develop their professional skills, 11 master craftspersons were offered two short training courses (20 hours each) from experienced engineers on hybrid cars and vehicle electronic systems.

PROGRAMME RESULTS AND LESSONS LEARNED

Recruitment and Retention: 70 apprentices took part in the basic training, 53 of whom (75.71%) had plans to continue the training and work in auto garages and workshops after completion of the basic training. The proportion of apprentices who completed only the initial basic training and the two week internship -could suggest reviewing the recruitment process in the future.

Skills Acquisition and Knowledge: Overall, based on their performance -assessments and in mentors’ reports, the apprentices achieved a high level of knowledge acquisition in competencies related to light vehicle repair and quick service for trucks and buses. This suggests that the pilot programme contributed to equipping them with the technical knowledge and skills required on the job. That said, some garages did not provide adequate training on certain skills. The mentors ascribed this to unsuitable working environments and a lack of necessary materials or tools to provide the apprentices with these

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4 Based on ILO methodology Work Improvement in Small Enterprise (ILO WISE)
skills. This suggests the need to conduct a preliminary assessment of the participating employers to determine the availability of programme skills in their garages and businesses.

**Occupational Safety and Health:** Most garages were provided with safety equipment (e.g., fire extinguishers, first aid kits, or occupational safety posters) based on their needs. After the intervention by the OSH advisor, some garage owners made modest improvements in their workplace, particularly in terms of cleanliness and workplace organization. Those who did not cited a number of reasons for doing without, including the expense of purchasing equipment, lack of government oversight and inspection, indifference or excessive confidence that they do not need it, and the intention to purchase equipment or supplies at a later date. Meanwhile, most auto repair workshops do not keep accident records, making it difficult to accurately gauge safety conditions there. Based on the data obtained from field visits and the OSH expert’s assessments, it is safe to say that the risks are high in these locations.

**Workplace Management and Organization:** Overall, results of the workplace management coaching were below expectations. According to the work management expert and field advisors’ reports, the primary reasons for their failure to achieve the desired improvement are the costs of changing the workplace setting and, in some cases, insufficient space. Per the work management expert, improving the work environment would require strong desire and commitment from the employers; however, some of them declined to consider even low-cost, easy to implement improvements. The majority of owners cited the difficult economy and lack of available financial resources. Notwithstanding these obstacles, employers still found the training and coaching they received to be very useful, providing them with new familiarity and technical understanding of hybrid cars, vehicle electronic systems, invoicing, environmental services, customer waiting area, and equipment.

**Apprentice-Master Craftsperson Relations:** Overall, apprentices enjoyed good relationships with the other workers in their shops. The mentors insisted on the importance of a positive relationship between the apprentice and the master craftsperson for successful skills acquisition, and field advisors observed that the apprentices who had strong relationships (characterized by affection and respect) with the master craftsperson training them acquired more new skills than those who were more distant with their workshop mentors. The apprentices did not interact with customers, but may have observed positive customer relations by watching their employers.

**Employer Buy-in:** Building trust between the programme administration and employers contributed significantly to the success of the programme and achieving its goals. Initially, employers were not particularly cooperative with the advisors and experts. After recognizing the benefits of the programme for the apprentices, the employers realized that the experts aim to provide advice, improvement, and training, and not to supervise or inspect. Once they understood and valued the experts’ role, the employers’ cooperation was significant and influential.

**Programme Outcomes**

Compared to traditional informal apprenticeships, this pilot programme shortened the transition period from apprentice to employed skilled worker with less than one year of training as opposed to up to five years in the typical apprenticeship. The dropout rate from the programme was also significantly lower than in traditional programs. The employment rate and the salary scale are comparable with the outcomes of informal apprenticeships.
High Training Completion Rate. 76% of the apprentices completed both the basic training and on-the-job phases of the programme, while 16 apprentices (23%) participated in the basic training and field training for two weeks only. The apprentices’ unwillingness to continue the second phase of the programme is due to various reasons, mainly pursuit of study at community colleges, pursuit of undergraduate study, or preparing for the general secondary examination. Only one apprentice dropped out over the course of the programme, and that was to accept a job abroad.

High Pass Rate on the Occupational Test. 47 out of 53 apprentices (89%) passed the occupational skill test and received occupational licenses at the “skilled” level from the Centre for Accreditation and Quality Assurance. Four apprentices (8%) did not sit for the test because they were either still undergoing training or had already found jobs; these four are expected to apply for the license soon. The remaining two apprentices took the test but failed.

The occupational license is nationally recognized by both employers and training institutions, and is an important credential for the young workers’ career.

Strong Employment Outcomes and Wages. 49 apprentices (92%) obtained a job, mostly in the repair shop where they were trained. The four who have not yet passed the test are not employed. Of those who are already employed, 44 (90%) earn a salary above the minimum wage of 190 JD (US $268). Thirty four (69%) are earning between 200 and 250 JD (US$ 282-353), and 10 (20%) earn over 250 JD (US$353).

Rated Highly Effective by Beneficiaries. Apprentices and employers were asked to evaluate the effectiveness of the training programme. Apprentices gave the highest score (93%) for their overall perception of the program and their personal outlook as a result of participating. They rated training and skills acquisition as the next most effective dimension of the program at 87%, followed by management of the work environment (81%). The field reports indicate that basic training, master craftspersons in the workshops, field advisor follow-ups, and visits by the project organizers to the workplaces, helped make the project effective from their perspective.

<table>
<thead>
<tr>
<th>Area</th>
<th>Average (Likert 1-5)</th>
<th>Percentage</th>
<th>Overall Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall rating and outlook</td>
<td>4.68</td>
<td>93%</td>
<td>High</td>
</tr>
<tr>
<td>Training and skills acquisition</td>
<td>4.37</td>
<td>87%</td>
<td>High</td>
</tr>
<tr>
<td>Work environment</td>
<td>4.06</td>
<td>81%</td>
<td>High</td>
</tr>
<tr>
<td>Effectiveness of training program (overall)</td>
<td><strong>4.31</strong></td>
<td><strong>86%</strong></td>
<td>High</td>
</tr>
</tbody>
</table>

The master craftspersons rated the programme highly effective at 86%. Of the specific aspects of the programme they were asked to rate, they gave training and skill acquisition the highest effectiveness score at 92%, followed by overall assessment and future prospects (88%) and work environment (77%). Work environment was the only domain that respondents rated as moderately effective.
CONCLUSIONS AND RECOMMENDATIONS

Upgrading informal apprenticeship models shows promising potential as a poverty reduction method because it targets skills training needs in workplace environments dominated by poorer businesses and households. The model provides a step by step process, based on constant negotiations with the employers. At the same time, not all improvements in terms of work contracts, OSH, training contents and working conditions can happen at once, and trust building is as important as the immediate outcomes in the training process. In addition, the integration of well-organized apprenticeships into skills training programmes enhances employability skills and increases employment opportunities for youth.

The pilot showed positive results in terms of employment of graduates, and shortened school to work transition, but challenges remain at two levels: (a) the absorption capacity of apprentices by small enterprises, requiring a flexible approach, and (b) the OSH and work improvement components that must be embedded into more comprehensive strategy in order to achieve their full potential. There is also a need for more rigorous longer term impact evaluations on larger scale samples to identify the net employment impact of the upgraded apprenticeship model, and the return on investment for this innovative intervention.

Recommendations

- Replicate this pilot model in order to expand and adopt best practice apprenticeship models nationwide.
- Implement the programme through a national effort led by employers and guilds working with training providers, trade unions, chambers of industry and commerce, the Ministry of Labour, and government agencies, and providing clear roles for each partner to support all components of the programme. Each can contribute to identifying employers, employment opportunities, and the skills required by employers; evaluating workplaces where employment opportunities are available; developing training programmes and training materials; setting standards for and selecting job seekers; career guidance; accrediting the programme; delivering the training itself; evaluating and certifying apprentices; and assessing the programme impact.
- Develop a formalized framework for the apprenticeship programme, including the contractual terms between apprentices and employers.
- Reconsider the role of labour inspectors so that their tasks include evaluating work environments and providing advice in addition to their supervisory role. This would require capacity building for the inspectors.
- Focus more on informal apprenticeship programmes when developing education and training policy, and develop mechanisms to recognize enterprises as training providers, and employers/master craftspersons as trainers.
- Review the overall duration of the programme and the duration of basic skills training in proportion to the on-the-job training.
- To select institutions to participate in the programme, the willingness of the institution to get qualified apprentices should not be the only decisive factor. Standards related to the work environment and occupational health and safety requirements should be developed so that these institutions are adequately assessed in advance.
- Include principles of organization and management in the basic skills training provided for apprentices, which will in turn have a positive effect on their performance when they enter the job market.
- Train employers on workplace improvements and management as well as occupational health and safety before sending in apprentices for their apprenticeships.