Apprenticeship Training in Pakistan: A Comparative Study of Apprenticeship Practices in Punjab and European Countries

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Abstract

In this era of global competition, human resources will play a decisive role in the battle for efficiency and competitive advantage, where nations and organisations with superior and quality-oriented human capital will soon outperform those with inefficient and quantity-oriented labour force. Rate of human capital formation will be more important than the rate of physical capital formation in the race for economic development and growth among nations in a knowledge based global economy. In the same manner, access to and maintenance of skilled human resources will be of equal importance as access to capital or rapidly changing technology in the race for competitive advantage among the organisations in a global marketplace. The easiest, quickest and the most reliable source of providing skilled manpower are the vocational education and technical training (VET). VET has different channels of which Apprenticeship Training is the most recognized mode due to its peculiar aspect of on-the-job and many a times off-the-job training as well. Many of the advanced countries in the world have benefited from Apprenticeship Training to build strong economies based on state-of-the-art technologies and resultant demand of high calibre skilled manpower. In Pakistan, Apprenticeship Training has been in practice, voluntarily, since inception and statutory since 1962. Despite the lapse of so many years, we are lagging behind relatively. The subject needs to be reviewed critically in order to make it more productive both in terms of quantity and quality. This study is aimed at gathering and synthesizing factual data related to apprenticeship training in the Punjab province of Pakistan. The information, further, would be used to develop a comparative analysis of apprenticeship training in Pakistan vis-à-vis European practices. The countries chosen for

the study are 'dual-system' countries like Austria, Germany, and Switzerland and others like France, Denmark, Netherlands, Italy, Britain, Ireland etc. The outcome of the study would help the theorists and policy makers to better understand the dynamics of apprenticeship training in Pakistan and formulate appropriate response policy for its up-gradation and development.

Introduction

Human resources of the organisations are taking the connotation of 'human capital' instead of mere 'labour'. Access to and maintenance of skilled human resources will play the decisive role in quest for productivity and competitiveness among the nations and organisations in a global marketplace. So, training is sine qua non for business establishments particularly in perspective of the tough competition where survival of the fittest has become the rule.

According to Brinkerhoff (2006), "the human resources are the most valuable assets of the organisation and, thus, expenditures on training should be regarded as 'investment in people' and, therefore, the most valuable investment of all". The other research work in this area also confirms a significant impact of training on workers' and organisational productivity and other business results (Dearden, Reed and Reenen 2005, Kavanagh, Jennifer 2005, Bragar, Joan L., Johnson, Kerry A. 1997, Eicher, Theo and Kim, Sang Choon 1999,).

There are different types and designs of training to upgrade the knowledge and skill of employees and on-the-job training is taken for the best in this regard. On-the-job training is also used to produce skilled workers for industrial sector and one popular form is known as Apprenticeship Training.

Recognizing its importance, industrially advanced countries like Germany, Italy, Japan, US, Netherlands, France and many others have extensively used apprenticeship training in order to ensure availability of fresh and energetic skilled workers to their industry. Amazing results have been achieved in these countries to cope up with the threat of shortage of skilled workers as well as improving on the efficiency and effectiveness of industrial workers resulting in enhanced productivity with minimum possible costs using state-of-the-art technologies.

Apprenticeship in Pakistan means a system of training in which an employer undertakes to employ a person and to train him or have him trained systematically in an 'apprenticeable trade' for a period the duration of which has been fixed in advance and in the course of which the Apprentice is bound to work in the employer's service (Apprenticeship Ordinance 1962). Although, in Pakistan, Apprenticeship Training is in practice under legal

and statutory auspices along with the necessary basic infrastructure required for the programme, yet we are lagging behind the western countries where apprenticeship training is successfully established. In this article an attempt will be made to explore the factors for underutilization of the apprenticeship scheme using the example of European countries. The countries chosen for this study are 'dual-system' countries like Austria, Germany, and Switzerland and other like France, Denmark, Netherlands, Italy, Britain, Ireland etc.

The Framework

Composition of Industrial Labour Market

Different channels contribute to provide skilled manpower to the industrial labour market including Technical training.

Pakistan is a developing country consisting of 160.9 million population with GDP growth rate of 5.87 percent in 2007-2008. Overall manufacturing registered a modest growth during the last few years e.g. 5.4 percent during 2007-2008 and 8.2 percent during 2006-2007 demanding for a greater number of skilled industrial workers.

In order to meet the demand, targets have been adopted by Technical Education & Vocational Training Authority (TEVTA) for the acquisition of qualifications by young workers e.g. under TEVTA Special Training Programme (TSTP) 100,000 young persons were to be provided technical training in TEVTA institutes during 2007. So, progress towards meeting the training targets has occurred largely along the full-time, classroom-based route— technical and vocational. The work-based route has thus far contributed little. An expansion of work-based learning can tap its greater appeal to many young people than that of fulltime classroom-based learning.

Apprenticeship Tradition

The German-speaking dual-system countries have a strong apprenticeship tradition which is continuing to attract large number of young people and employers to engage in apprenticeship across all sectors of the economy. In these countries at least two thirds of all young people embark on – and the great majority complete – apprenticeship training (Beckmann 2003).

France has a more restricted apprenticeship tradition; between 10 and 15 per cent of young people enter apprenticeship, but numbers have grown very rapidly in recent years and this makes France an interesting case for study.

Like the German-speaking dual system countries, Denmark has a long tradition of apprenticeship. A rolling programme of change and reform has

been in place for the past twenty years and the proportion of young people entering apprenticeship has remained roughly constant. Currently around a third of young people in Denmark gain a vocational qualification through apprenticeship (Stedman 2001).

The Netherlands has also restructured vocational education following new legislation in 1996. Apprenticeship numbers, which had been declining in the 1980s, reversed that decline in the 1990s and are continuing to increase. Currently around 30 per cent of young people in the Netherlands enter an apprenticeship programme (Wendy Smits-2004).

In Europe, the country with weaker tradition of Apprenticeship is Britain where the percentage of a young age cohort starting apprenticeship (in England and Wales) is around 9 percent for Modern Apprenticeship (MA) and 11 percent for Traineeships (Reyna and Unwind 2004).

In Pakistan, the tradition of Apprenticeship is weaker where negligible ratio – even less than 1 % - of the youth enters and completes apprenticeship. Tradition of apprenticeship training in different countries is summarized in Table 1.

Austria	42%
UK (MA)	14%
Germany	57%
France	15%
Netherlands	30%
Denmark	41%
Ireland	9%
Pakistan	<1%

Source: Paul Ryan (2000); TEVTA (Punjab, Pakistan)

Table 1. Percentage of Young People Undergoing Apprenticeship in Different Countries

Status of Apprenticeship

In most of the countries, apprenticeship functions nowadays within the framework of statute law while in the other, one or more pieces of legislation defines what apprenticeship is and what it is not—i.e., provides for the legal definition of its occupational coverage and training content—and provides

powers for its governance and adaptation. The best known is Germany's Vocational Training Act of 1969, which, though built upon previous statutes and limited to workplace training by non-artisan employers, provided the framework for the contemporary regulation of training quality and educational contribution in apprenticeship for industrial and commercial occupations. The key enabling legislation dates in most cases from the 1960s. The governance structures that had been erected by the end of the 1960s have subsequently been amended by further legislation, particularly during the past decade, except in Pakistan. Thus the Danish law of 1989 and the Dutch law of 1995 both integrated apprenticeship with other modes of upper-secondary vocational education and qualifications (EFG part-time and school-based full-time, respectively; Nielsen, 1995; van Lieshout, 1997a). Table 2 summarizes the various legislations and subsequent amendments in the statutes for apprenticeship in different countries. It also depicts different dimensions of the law.

	Germany	Austria	Denmark	Netherlands	Punjab/Pak
Principal Law	Vocational Trg. Act 1969	Vocational Trg. Act 1969	Apprenticeship Act 1937	Apprenticeship Act 1966	A.O.1962 App.Rules 1966
Secondary Law	1981, 1994	1993, 1997	1956, 1989	1992, 1995	---
Responsible Department	Education	Eco. Affair & Education	Education	Education	TEVTA
Employer Participation	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
No. of App. Trades	356	252	86	515	157*
Min. Skill Level	Craft	Craft	Craft	Craft	Craft
Training Duration	2-4	2-4	3-5	2	6 months to 3 years
% of Off-the-Job Training	33	25	33	33	33
Trainee Certification	Yes	Yes	Yes	Yes	Yes

Source: 1. Paul Ryan, 'The Institutional Requirements of Apprenticeship; Evidence from Smaller EU Countries' International Journal of Training and Development 4:1- 2000 2. TEVTA, Punjab Pakistan

Table 2. Legal and Administrative Dimensions of Apprenticeship Training in Different Countries

Administration

Formal responsibility to administer apprenticeship training in different countries has been allocated to a particular Ministry— variously, Education (in Germany, Denmark and the Netherlands), Economic Affairs (Austria) and Employment (Ireland). The designated Ministry either retains administrative control in its own hands (Austria, Netherlands) or delegates it to a national training authority (Germany, Denmark, Ireland). In either case, provision is typically made for a national body, such as Ireland's National Apprenticeship Advisory Committee, to involve representatives of the views of interested parties—employers, employees and teachers, though not apprentices themselves—and to advise the responsible authority. The principle of social partnership is thus embedded in the national organisational structure.

In Punjab, Pakistan, Ministry of Labour and Manpower previously had the onus to administer apprenticeship in the province. But since its inception, the responsibility has been assigned to TEVTA. It was being expected that under administrative control of TEVTA, apprenticeship training will flourish like other vocational and technical

> ** At present, there are 157 Apprenticeable Trades in Punjab Pakistan. These trades cover various industrial sectors like Construction, Mining, Textile, Fertilizer, Sugar, Cement, Automobile, Electric & Electronics, Food & Beverages, Hotel & Restaurant etc.*

training routes but of no avail. Numbers of factors are responsible for this position of status quo that will be discussed in the article.

The Content of Training Programme

Duration of Apprenticeship Training

In the German-speaking 'dual-system' countries – Austria, Germany and Switzerland – every apprenticeship leads to a recognised occupational qualification and the length of the apprenticeship training period for each occupation is fixed and specified by the relevant legislation. The specified period can be shortened in the case of entrants to apprenticeship who hold the Hochschulreife (Abitur) in Germany or the Maturität in Austria (Hilary Steedman – 2001). In Switzerland it is rare for entrants to apprenticeship to hold a university entrance qualification, and in Austria there is provision for

the training period to be shortened for those who already have substantial experience/ qualifications in the occupational area concerned. However, the vast majority of those who enter 'dual system' apprenticeships follow the apprenticeship training programme for about three years.

Denmark has a long-established tradition of apprenticeship training based on 'dual-system' principles, and has recently (with effect from 2001) reformed and revised apprenticeship education and training arrangements and requirements. As before, young people who decide to study for a recognised vocational qualification will alternate between periods of study in college and periods of work in a firm. But the new arrangements stress flexibility and individualisation of training programmes within a statutory framework. The aim is to adapt to students' individual abilities, needs and interests, to promote high achievement and prevent drop-out. As a consequence, training periods are expressed in terms of minimum (1½) and maximum (4½) years duration (OECD, 1999). The typical duration is 3½–4 years. The basic (first part) of the apprenticeship training cannot be completed in fewer than ten weeks of college-based education and the college-based component of the main (second part) of the apprenticeship normally has a maximum limit of 60 weeks. The distribution of apprenticeship training programmes in the dual-system countries by duration is summarized in Table 3.

In France and the Netherlands, apprenticeship can lead to an occupational qualification at a number of different levels ranging from the equivalent of the UK NVQ2 (in the Netherlands a very small number go no further than an NVQ1 level) to the equivalent of UK NVQ5 (France) or UK NVQ4 (Netherlands). Those who move from one level to the next will spend a period of 2+2 or even 2+2+2 years in apprenticeship (Steedman et al – 1996).

Duration of apprenticeship programme in Punjab, Pakistan, ranges from 6 months to 3 years (for quick comparison see table 3) and is identical with the standards in the countries chosen as example here. Yet there is a need to bring flexibility in the duration as some high-tech industries want to recruit more qualified persons to suit their need and hence curtail the training period. This trend is growing worldwide. For example, in its Consultation Document on Modern Apprenticeship (published in 2000), the UK government asked 'Can improved LSC [Learning and Skill Council] inspection and quality assurance arrangements ensure training is done properly without the need for minimum periods of training?' The Confederation of British Industry (CBI), representing some 250,000 employers, reiterated its opposition to fixed duration of training periods. In their response to the Consultation Document, the CBI wrote 'Employers are not educators and Modern Apprenticeships are part of the foundation learning system – not the education system'. The CBI therefore rejected proposals put forward in the Consultation Document for minimum periods of training and for mandatory periods of off-the-job training

on the grounds that these will not deliver the results we all want (CBI 2000).

	2 years & < 3 years	3 years & < 4 years	4 years
Austria	10	88	02
Denmark	Typical		
Germany	6	72	22
Switzerland	30	50	20
UK	NVQ Level 1-5 & GNVQ; Percentage Varies		
France	-	-	-
Pakistan (Punjab)	3	97	-

Sources:Austria:http://www.bmwa.gv.at/service/leservice/broschde/%FCbersicht2.htm(accessed 21/03.01). Denmark: http://www.uvm.dk/pub/2000/newstructure/6.htm (accessed 22/03/01). Germany: Berufsbildungsbericht 2000 2.2 Table 42. Switzerland: Statistik Schweiz 15, Bildung und Wissenschaft, DieBerufslehre in der Schweiz, http://www.statistik.admin.ch.stat_ch/ber15/dlehrvertr_intro.htm (accessed 21/03/01). UK: Howard Gospel (1998) Pakistan (Punjab): TEVTA

Table 3: Duration of Apprenticeship Training Programme (% of all programmes)

Intake of Apprentices

In almost all the European countries considered here, responsibility for finding an apprentice place rests with the young person. The young person wishing to enter apprenticeship must find an employer willing to take him/her on.

In Pakistan, the condition is more favourable for apprentices as the employer is to advertise the vacancies for recruitment. Small scale employer who does not advertise, searches for apprentices through references. So, the responsibility for intake of apprentices is shared both by the employer and the apprentice.

Yet, the European countries have a more systematic way to pass on information about apprenticeship careers to its youth e.g. the German-speaking dual system countries make provision for the study of career options available through the apprenticeship route. This process starts in the last two years of compulsory schooling (from about age fourteen) when specific lesson periods are set aside for careers teachers to work through information packs, and other materials which explain career options, the occupational structure and the training required (Jarvis, 1994). Visits are arranged to Centres run by the Careers Service and school students are encouraged to explore the information available independently.

An important thing that we are missing in our Apprenticeship Training system is easily accessible and comprehensive information on occupations, qualifications and the offer of apprenticeship places—the things that are essential for the match to be successful. In Germany and France excellent websites with comprehensive information on occupations are available. In addition, a range of sites in Germany allow the young person to search by occupation a database of employers who are seeking apprentices.

Moreover, there are no legally prescribed pre-requisites for entry to apprenticeship in the other European countries considered here. Nevertheless, in the dual system countries it is well-known that good school marks will open the door to a prestigious occupation or firm. The importance that firms attach to school marks means that most young Germans have an incentive to do as well as possible at school in order to have a chance of the apprenticeship of their choice. Only a very few fail to obtain one of the various recognised school-leaving certificates in the German-speaking countries and in Denmark. Low marks do not mean to close the path to Apprenticeship Training. The wide range of authorized apprenticeships ensures that young people with only modest academic attainments also find an apprenticeship place and benefit from apprenticeship in the dual system (Heinz et al 1998).

Elements of Training

In general, following are the prevalent elements of apprenticeship training in most of the countries…

a. Technical Training / on-the-job Training
b. Institutional Training / off-the-job Training
c. General Education

In the 'dual-system' countries, standards of general and technical education are differentiated by occupation. It is accepted that some occupations will make more stringent demands in certain areas of general and technical education than others. In Germany, Austria and Switzerland, the regional Ministry of Education and in Denmark the national Ministry draw up standards in consultation with the industry body responsible for a given occupational area.

In France and the Netherlands all apprenticeship programmes are required to offer general and technical education components. However, the balance may vary by occupation and by level. The 1996 reform of vocational education in the Netherlands specified that at each level courses were to have three dimensions which correspond to the three elements outlined here (Down, 1999). These are:

- Social/cultural;
- General/technical (to ensure progression possibilities);
- Vocational.

Overall, in all these countries, between 70 and 80 per cent of an apprentice's training period is spent in the workplace, including time devoted to workplace training. (Table 2 presents the ratio of off and on-the-job training in different countries). The distribution of the apprentice training period between time spent in the workplace and time spent in school is thus weighted heavily towards the workplace in all countries. In all the 'dual-system' countries and in the Netherlands, off-the job education and training is ensured through compulsory attendance at publicly provided vocational colleges/institutions within the wider structure of upper-secondary school provision.

In France, until recently, employers and Chambers of Commerce were the main providers of off-the-job education and training for apprentices. However, the curriculum to be followed and assessment procedures are identical to those in full-time publicly provided vocational education. A recent innovation in France is the provision for apprentices to attend a publicly provided vocational lycée for their off-the-job education and training assessment (Steedman 2001).

In Pakistan, there is a lot of potential to work on these lines. As a matter of fact, off-the-job training that includes academics, vocational and social subjects, aims at producing quality apprentices. Academic subjects were taught to the apprentices up to 1980s but were withdrawn later on. Unluckily, there has been priority fixed to augment quantity with a compromise for quality. In the same vein, unwilling employers are not persuaded to send apprentices to Apprentices Training Centres (ATCs) for institutional training just to enrol maximum number of trainees.

Vertical Mobility of Apprentices' Qualification

In many of the countries discussed here, apprentices' qualification is declared to a level of vocational certification that paves the way for an upward qualification. To ensure the quality of pass-outs, a system of tests and exams is under practice. In the countries of continental Europe considered here, the successful completion of apprenticeship is conditional on successful completion of both elements of the apprenticeship programme:

- Off-the-job general and technical education;
- On-the-job acquisition of skills and competences.

General and technical education is assessed in continental Europe by tests or examination set and marked by outside bodies or the regional education authorities. Occupational skills and competences are almost invariably assessed by practical tests (with external assessors), and through oral examination conducted by a panel of assessors. In addition, portfolio evidence is now also used as part of assessment of practical work in addition to the procedures

outlined above.

In all these countries, efforts have been made to improve the attractiveness of apprenticeship to more academically able students by improving links and bridges to the range of qualifications available from full-time education. In the Netherlands, for example, higher level vocational courses provided within the framework of higher education, including technical courses in a wide range of occupational fields and industries, are specifically tailored to graduates from apprenticeship.

In France, as another interesting case, state regulations have always prescribed that apprentices must study for nationally-recognised vocational qualifications which are identical to those awarded in full-time education. While numbers taking the higher levels through apprenticeship remain relatively small, there is no doubt that recent strong growth in apprenticeship numbers results from apprentices taking the higher level qualifications. Furthermore, the status of apprenticeship is being slowly transformed by greater association with the higher, and more prestigious levels of qualification in the French system (Vickerstaff 2003).

In Pakistan, no route is available for vertical mobility of the qualification as the standards for completion are neither fixed nor any attempt is made for provision of general and academic subjects in the training. As the result, Apprenticeship fails to attract industrious and intelligent young people that have the aspiration for higher qualification also.

Active Participation of Trade Unions / Associations

Attitude and involvement of the employer goes a long way on promoting apprenticeship training in any country. The countries being discussed here have a strong tradition of employer's active participation in the programmes for Apprenticeship Training. Not only the employer is individually involved, but the trade unions also play a positive role in this regard. For example in Germany, employers wishing to offer an apprenticeship in Germany will, if necessary, turn for guidance to the local Chamber of Commerce (IHK). The IHK has a legal obligation to champion the interests of industry and commerce in its area and offers a wide range of business services to all firms. It takes responsibility for most of the employer's administrative paperwork associated with taking on an apprentice and organizes the intermediate and final apprentice examinations. As in Germany, in France, the local Chamber of Commerce and the local Centre de Formation des Apprentis (CFA) help to put employers in touch with young people seeking an apprentice.

In Pakistan, although the tradition of vigorous involvement of the employer

regarding formal Apprenticeship Training is feeble, yet in some sectors informal system of the training is prevalent.

"Pakistan is the world's largest exporter of surgical instruments. The success of this sector is explained by simple technology and skills, an elaborate system of subcontracting among the large and small units and a thriving market for their products. The small enterprises possess a pool of skills and metal-working knowledge which, though limited, allows them to shift from one product to another… The main system of skill diffusion is through informal apprenticeship with the 'ustaad'—or master craftsman—transferring skills to young apprentices…" complemented by interaction with the large firms". (ILO 1998a, 167—168).

Whenever asked to train apprentices under formal system, many of the same employers will decline, perhaps, due to the legal modalities of the statute, additional work—in the form of record keeping, exams and certification—and most importantly, 'financial burden' in the form of stipend especially during off-the-job training.

Financing Apprenticeship Training

The apprentice, the employer and the government (the nation) are prominent stakeholders of Apprenticeship Training. The first one gets financial benefits directly in the form of stipend/salary while the other two bear the expenditures on the scheme partly or wholly. In most of the countries funds for the training are chipped in both by the employer and the government.

In Germany, There are normally no direct financial transfers of public money to firms with respect to apprenticeship. Finance for apprentices' in-firm training is provided by the firm. There are tax breaks for companies that train. In a small number of sectors (e.g., construction) the sector has agreed to a self-imposed levy on all firms to finance apprenticeship. There are also a number of arrangements in various sectors and localities for the setting up of joint training facilities. These are normally funded by employers directly through fees paid and indirectly through levies paid to the Chambers of Commerce. Joint training workshops also receive government funds for training unemployed young people and adult unemployed and Federal or Land capital grants for infrastructure. However, these grants are normally one-off pump priming payments rather than recurrent funding streams.

In Denmark, there are three sources of funding for apprenticeship…

- The government provides finance for off-the-job college-based vocational training by means of direct transfer of funds to the college.
- The employer pays the apprentice a wage
- The apprentice's wages while attending off-the-job training in college are 90% refunded by grants from a collective employers' fund (Steedman 2001).

In the Netherlands, government funds for vocational education and training are directly transferred to the ROCs (Regional Training Centres). In addition, the ROCs are free to bring in funds from other sources, e.g. offering courses to local firms. They are granted considerable autonomy to meet regional skill needs as they think fit. Government also funds the LOBs (National Education Committees) based on the training specifications developed, the number of plants providing training and the number of apprenticeships and other workplace training offered.

In Britain, unlike the other European countries described above, apprenticeship is not regulated by national legislation. Instead, regulations and guidelines issued by the Department for Education and Skills (DfES formerly DfEE) are followed in a variety of ways in different sectors, leading to wide variations in provision from sector to sector and locality to locality. Financial flows in Britain are also more complex than the arrangements for other European countries outlined above. Public funds flow from the budget of the DfES to local bodies (now Learning and Skills Councils, LSCs; formerly Training and Enterprise Councils, TECs). Funds are then distributed to training providers who contract with a variety of bodies for the provision of apprentice training and assessment required by DfES regulations. Funds then flow from providers to these bodies. In the process, equity and transparency are largely lost, so that the funding devoted to off-the-job training of apprentices can vary from one local body to another and from one provider to another. This contrasts sharply with the greater standardization of off-the-job training funding and provision on the continent achieved by direct transfers to public sector providers.

In Pakistan, expenditures on in-plant and institutional training are borne by the employer while government bears administrative expenses to run apprenticeship offices besides partly subsidizing off-the-job training / institutional training in Apprentices' Training Centres (ATCs). There is no collective funding arrangement by employers to bear the expense on Apprenticeship Training jointly. Each individual firm is responsible to pay stipends to the apprentice @ 50%, 60% & 70% during the first, second and third year of training respectively as against a skilled worker working in the same trade (Apprenticeship Rules 1966). Besides, the employer has to bear charges of ATCs for 6 months Basic and later on 6 months Advance Training there. The averting of Apprenticeship Training by employer—particularly in large organisations where apprentices'

strength exceeds 10—is well understood in a country like Pakistan where business firms keep facing a number of crises.

Conclusion and Policy Recommendations

In every European country discussed above, apprenticeship is a recognizable 'brand'. Although apprenticeship occupations differ in various ways, the national framework, underpinned by binding legislation on key features (duration, standards and assessment) provides a common identity which allows the 'marketing' of apprenticeship to employers and young people. Although, we, in Punjab have the necessary legislation and infrastructure, yet we are lagging behind due to number of factors like…

- Passive attitude of the employer towards Apprenticeship Training.
- No representation of chambers of commerce and industry and trade unions/associations in Apprenticeship Training matters.
- Poor standardization due to lack of consolidated tests and exams system for certification of due completion of apprenticeship.
- Apprenticeship Ordinance not revised even after the lapse of more than 45 years.
- Poorly qualified administrative staff as the most is matriculate while a few have Higher Secondary School Certificate or equivalent like Diploma in Associate Engineer (DAE).
- Apprenticeship Training stressed only for traditional sectors of craft and engineering at skilled worker level.
- Poor social status of Apprenticeship qualification as only the poor opt for it, mostly to avail stipend.
- A little awareness about Apprenticeship Training scheme in general public, especially amongst youth.
- Poor quality of pass-outs in the absence of commitment for excellence both by Apprenticeship administration and employer
- No options available for vertical mobility of qualification for apprentices
- Overall lack of industry especially of primary nature
- Recurrent economic and other crises that destabilizes the industry bringing on uncertainty and financial crunch

Flaws in Apprenticeship Training Scheme in Pakistan need to be addressed seriously. The first and the foremost important thing is the positive and vigorous involvement of the employer. All the countries presenting good enviable example of Apprenticeship Training have successfully promoted training culture that we have failed. There is a need not only to motivate the employer individually, but trade unions and chambers of commerce also should be engaged actively in the activities of Apprenticeship Training.

Moreover, the role of trade unions/associations should be multifarious ranging from collective financing of apprentices to consultation over new trades, trade duration, minimum required skills, tests and exams etc.

Apprenticeship Ordinance has neither been revised nor amended since its promulgation in 1962. It is too old to successfully meet the requisites of present era. In order to stretch and widen the scope of Apprenticeship Training scheme in the country, certain sections need to be amended to bring medium sized as well as non-traditional firms and sectors in the net. In addition to that, many of the notified trades and skills and operations have become obsolete that should be revised in consultation with representative trade associations and chamber of commerce. Similarly, new emerging apprenticeable trades should be included not only for traditional sector of engineering and manufacturing but also to incorporate new sectors like Health & Social Care, Customer Service, Business Administration, Hotels and Catering, Hospitals, Hospitality, Hairdressing, Retailing, Banking etc.

Another important issue is financing apprentices during on-the-job and off-the-job training. If we analyze, on merit, the matter of bearing all the expenses on training of apprentices (both on and off-the-job) by the employer, it is perhaps injustice against the latter. For example, an industrial unit having 10 apprentices on strength will have to bear about Rs. 3,80,000 p.a. under this head @ minimum wages under the law at present. Even in developed countries where opportunities and environment for business are ideal, governments contribute finances at least for off-the-job training in different ways as discussed on page 10 & 11. This financial burden on individual employer may be shared by government funding for off-the-job training or by levying contributions on the respective sector covering all the units with a consideration for size of the firm through chamber of commerce and relevant trade union or association. If sharing of the financial burden on employer for apprentices' training is managed, there will be amazing results to boost apprenticeship both in terms of quantity and quality.

There is a dire need to improve the quality of pass-out apprentices and establish certain standards for tests and exams. Present system of tests and exams in the Punjab as brought on via Apprenticeship Rules 1968, is neither solid nor being implemented in its true soul and spirit and hence undependable. The only way to ensure quality of apprentices is standardization of test and exams for on-the-job and off-the-job training for certification. Cross examination of apprentices in ATCs during institutional as well as in-plant training is sine qua non for the said purpose. In ATCs, exams should be conducted by the staff of other ATCs adopting a proper procedure as by Technical Education Board, Punjab. For in-plant examination and tests, cross examination by a board nominated by the respective trade associations or at least by the field officers of RDATs should be made compulsory. This arrangement will ensure not only the quality

of pass-outs but will pave the way also for vertical mobility of apprentices' qualification.

General public especially the youth is mostly unacquainted with Apprenticeship Training and the various options available by means of it. Dissemination of information about Apprenticeship Training particularly to the students of secondary schools is required in order to attract talented stuff for the scheme. Comprehensive information about Apprenticeship Training and the employers offering programs should be placed on the internet besides posting important basic information on the subject in print media. These measures will certainly help to raise social status of apprenticeship training in the country as in Germany 'a completed Apprenticeship confers a professional identity and consequent recognized social status' (Steedman 2001)

Last but not the least, both administrative staff of Apprenticeship Training and the employer have failed to keep the pace with changing needs and demands of the scheme. Energetic, agile and qualified young people should be inducted in Apprenticeship to work vigorously on various qualitative and quantitative aspects of the programme. Exhaustive task of revision of Apprenticeship Scheme cannot be carried out unless until qualified staff is recruited in the wing. Only the persons with a flair for research and development, credible administrative qualities and a genuine aspiration to work can submit themselves to the Herculean task of revamping Apprenticeship Training in the province.

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