An Assessment Of The Technical Education Community Outreach Scheme

(This is an attempt to look into one of the Technical Education schemes introduced by the Government of Delhi. In this, I have attempted to try and understand the dynamics of its intricate co-operative mechanism and its actual implementation, looking also at few of the bottlenecks encountered by this educational scheme at various levels.)

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CONTENTS

ABBREVIATIONS

DTTE: Directorate of Technical and Training Education

NCVT: National Council for Vocational Training

SCVT: State Council for Vocational Training

NGO: Non- Governmental Organisation

AICTE: All India Council for Technical Education

ITI: Indian Technical Institute

TECOS: Technical Education Community Outreach Scheme

ACTT: Advisory Committee on Technical Training

HLC: High level Committee

Acknowledgements

Technical Education Community Outreach Scheme (TECOS)

INTRODUCTION

I will give a brief historical perspective of technical education in India for only then I guess one can rightly put any scheme on Technical Education in its right context. So with this intention, I would start by a brief summary of the history of technical education.

The 18th century was a watershed in human history and one of the greatest innovations of this period was the industrial revolution. I will not go into the details of this revolution but what is important to keep in mind is that it introduced a new element in the production and distribution system, laying the foundation of a technological civilisation. The Industrial revolution subsequently brought a new economic order dividing countries into groups- industrial society and its colony giving birth to a new socio-political order characterised by the term 'imperialism'. The Industrial revolution also ushered in a new system of learning to satisfy the growing needs of such an industrial economy called technical education.

Technical education is a tailor made learning-training process specially designed for supplying trained man-power for industrial and economic development through a judicious application of science and technology. The first technical institution came into existence in 1790 founded by Dr.John Anderson as a school for general education for craftsmen and artisans and for teaching apprentices the use of machinery. If we focus our attention on India, we will see that the foundations for technical education in India was laid about the same time as in the rest of Europe, but the fact that India was ruled over by British overlords meant that technical education in India under the British was designed primarily designed to produce trained manpower required for running a colonial government and to support an industrial society in Britain. The aim of technical education was not to foster the growth of an industrial society in India. As a result of this industrial progress and the development of technical education in India both remained marginal.

The beginning of the 20th century saw a growing realisation of the importance of technical education for the development of the economic base of the country. Thus, some nationalist leaders started a college of engineering at Jadavpur, Bengal. The college started a diploma course in mechanical engineering in 1908 followed by a chemical engineering course in 1931. However despite this, India lagged behind in basic industries and development of electrical power and the growth of technical education remained stunted. With the starting of the World War II, the British realised the importance of having locally trained technical personnel of quality in large numbers and 1940 saw the introduction of the 'War Technicians Training Scheme'. It was aimed to meet the requirement of industries engaged in defence production and allied war-efforts.

In 1944, Sir Ardashir Dalal of the planning committee reiterated that for successful industrial development, large scale expansion of technical education was paramount. This year saw significant steps for the development of Technical Education:

1. The development of All-India Council of Technical Education (AICTE) to advise the government on development of all aspects of technical education.
2. The Advisory Committee on Technical Training (ACTT) was established to adopt the War Technicians Training Scheme to meet peace time requirements of the country.

What we should remember is that to promote economic and industrial development of a country, one of the most important requirements is the capacity to develop technical man-power of good quality in adequate number. A well organised system of technical education is essential for the development of manpower ranging from skilled workers to highly technical engineers and research scientists, an intellectual and labour base which alone can stir a nation onto the path of economic development and industrial growth. Realising this post-independence India has seen a steady growth in technical education

By 1966, 135 institutions offered degree courses in about 35 branches of engineering and technology. 280 polytechnics were established; while at the craftsman level 350 Industrial Training Institute came into existence.

A – Structure of Education and Training
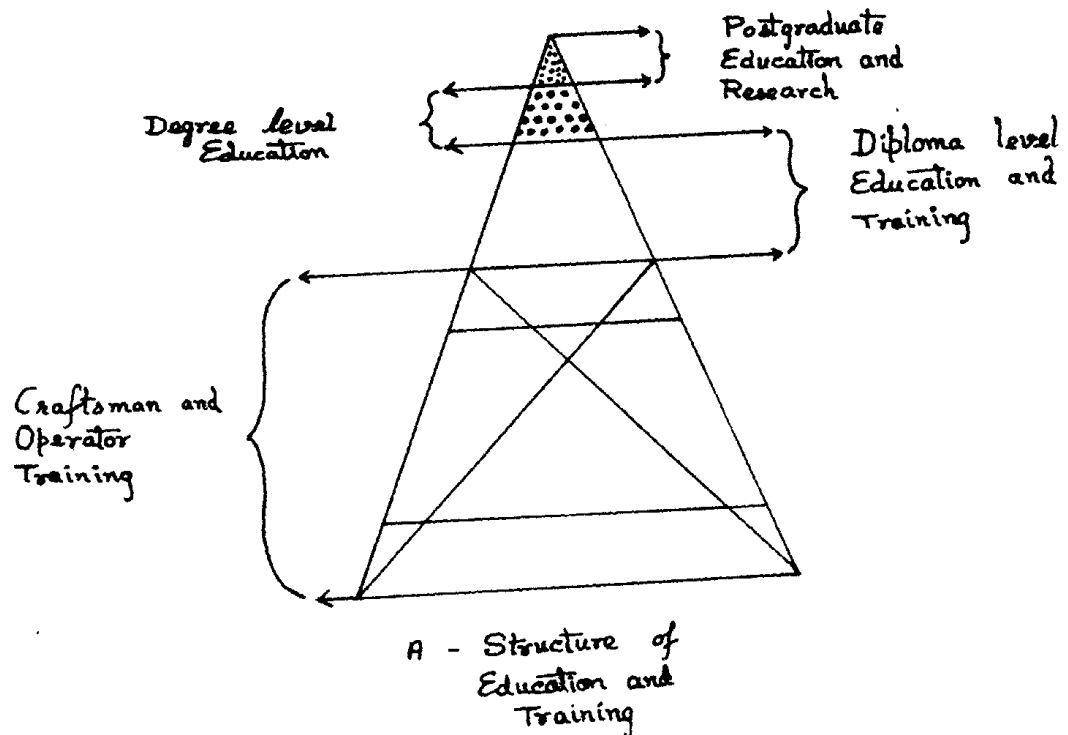
From the figure here we can understand that the basic structure of technical education in India is still heavily concentrated on the craftsman and operator training. At present the craftsmen are either trained in Industrial Technical Institutes (ITI) Or Apprenticeship Training Institute (ATI). The duration of institutional programme followed by ITI varies from 1-2 years. The admission qualification used to vary from 8th class passed to 10 years of school education. However, attempts are made to reorient the programmes for training craftsmen especially at the ITIs. The admission qualification for all trades were standardised to 10 years of schooling and the duration is standardised to 2 years of training. The training of highly skilled workers in sophisticated skills not available under normal craftsman training is imparted in select ITIs. However, this does not solve the problem of imparting technical education especially technical education at the craftsmen or basic operator level for all those who were from the

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impoverished sections of society and not just from normal middle class backgrounds and it is to impart basic technical education at the junior craftsmen or basic operator level to this dispossessed target group that various schemes have been launched at both national level and at the state level and one such scheme is the TECOS.

TECOS

Though technical education has made rapid strides in India but even then in a recent survey of the Asian Development Bank has shown the technical education in Japan and Korea are of a more advanced nature than in India, the public expenditure in India on Vocational education has been computed to be 4.4%(1999), but we know how important technical education is in creating a skilled labour class in a rapidly industrialising country. Keeping this in mind and the needs of the dispossessed class, we have new technical educational schemes launched in the recent years; the one I will be focussing is Technical Education Community Outreach Scheme (TECOS).

OUTLAY OF THE PLAN

The TECOS stands for Technical education Community Outreach Scheme and is a programme which was implemented from 2008 onwards and aims at imparting Technical and Training education to the poorest sections of the society of Delhi. This programme is a part of the Delhi Governments overall effort to engage with the underprivileged local community to ensure that basic technical education is provided to them and this has a two pronged response. Firstly, it provides the impoverished section employment opportunities helping them to earn their own livelihood while at the same time meeting the requirements of manufacturing and service agencies for skilled and semi-skilled labour.

This whole enterprise is implemented through the Directorate of Technical and Training Education (DTTE), a subsidiary branch of the Delhi Government which is responsible for looking into all matters related to Vocational training. However, the DTTE realised to implement this scheme effectively, they need the active co-operation of those groups which work in close proximity at the grass root level with the poor and the needy, and Hence the main operating agency for this scheme are the Non-Governmental Organisations(NGO). Apart from these, the DTTE has the ITIs and the polytechnics to serve as supervising institutes responsible for successful implementation of this plan. Let us now

examine how the different bodies are supposed to function in this multi-tiered scheme and try and examine the roles delineated for each organisation under this.

THE VARIOUS COMPONENTS OF THE PLAN

DTTE: This body approves authority for all grants to NGOs. The TECOS unit within the department is responsible for setting broader policy directions for implementing this scheme. To ensure the overall effective implementation of this scheme, it has established scheme management committee named as High Level Committee (HLC) which includes experts at various fields. The DTTE has also established supervising committees comprising of ITIs and polytechnics to oversee the quality and nature of technical education imparted to the impoverished sections by the various NGOs. Another important responsibility of the DTTE is to shortlist various NGOs who would serve as the main operating agency for imparting technical education to the impoverished sections in the local community under this plan. All NGOs willing to participate as active partners in this scheme have to send applications to the DTTE for screening and they have to possess the following criterion:

- The NGO must be a non-profit organisation registered under Indian Societies Registration Act of 1860.

- The NGO must at least have 3 years' experience of working in a field related to technical education or for providing livelihood opportunities for slum population

- Their financial condition should be sound having basic infrastructural facilities, resource and experience to undertake work

- The NGOs should have a capacity to plan service delivery, set clean measurable objectives linked to a time-period and highlight strategies that the organisation would take to achieve these objectives.

  The screening cum selection committee consisting of Government nominees, institutional nominees as well as technical experts will short list eligible NGOs for the proposed partnership on the basis of these detailed term and conditions as well as other government and technical norms.

These short listed NGOs shall then be invited by Department of Training and Technical Education to make a detailed presentation before the screening cum selection committee about the suitability and capability of these NGOs for fostering this partnership with the government on these broad parameters:

1. Organisational profile

2. Work experience, especially work related to technical education services for under privileged sections of society or for providing livelihood skills for residents of slum areas.

3. Proof of achievements of the organization in the aforementioned lines of work.

4. Financial strength and capabilities status.

5. Members' personal profile.

6. Number of personnel(paid or honorary) along with their pay structure

7. Strength of organization and suitability to delivery services under this scheme

NGO: The NGOs once selected as part of this plan are responsible for providing facilities for imparting Technical education in the impoverished areas of Delhi as per MES pattern , with a view to getting the beneficiaries/ trainees certified by the NCVT/ SCVT through examinations held per module. They are responsible for conducting a baseline survey of the community's needs for self/wage employment and on the number of industries/organizations available in the nearby vicinity with outsourcing potential. Some other functions of the NGO:

1. Preparing and mobilizing the community in getting skill enriched. Enabling the industry to understand the potential and opportunities for reorganizing their production processes in order to derive benefits from decentralized production through the beneficiaries of the program.

2. Engaging instructors, providing materials and supplies required for training and ensuring that quality training is provided to beneficiaries.

3. Selection of suitable beneficiaries

4. Ensuring a productive tie-up between beneficiaries and potential employers and financial institutions.

5. Enabling a part of training to take place in real work setting in collaboration with industries.

6. Ensuring the quality of training is high-enough to enable beneficiaries to get certificates from NCVT/SCVT.

7. *Submitting funding proposals, audited financial statements, evaluation reports and an annual plan of action to the supervisory institute, with a copy marked to the high level committee. This annual plan would include: the areas in which the NGO proposes to operate, the trades/ modules in which training would be imparted and the number of beneficiaries proposed to be trained, efforts that would be made to get the certified trainees wage/ self-employed and efforts for ensuring that the training provided by the NGO is in tune with the demands of the industry/community and in keeping with the requirements of the market. The annual plans so prepared by the NGO concerned, for the succeeding year, would be submitted to the supervisory institute atleast one and a half months before the close of the financial year. This would help them to receive accreditation for the next year to carry on with the programme.*

8. Enabling a part of the training to be in real work settings and that training is production oriented and surpluses are shared with beneficiaries.

SUPERVISING INSTITUTES: The various supervising institutes appointed had a large number of functions. Most ITIs and Polytechnics performed the role of supervising institutes. Some of these functions, I am outlining below:

1. Carrying out weekly monitoring visits to ensure that the trainees are able to meet the skill milestones set by the high level committee for implementing the scheme and holding monthly progress review meetings with the various stakeholders to ensure that the implementation of projects and courses are progressing on expected lines and that they are able to deliver desired outcomes.

2. Carrying out field visits is required from the high-level committee/ departmental officers concerned.

3. Analysing monitoring reports submitted by NGOs, in order to give corrective feedback to NGOs and performance reports to the High Level Committee.

4. The Supervisory institute will review and modify the annual plans for the subsequent year , submitted by the NGOs coming under their area of operation , consolidate these annual plans and submit the same for the approval of the high level committee / concerned departmental officers atleast a month before the close of the last quarter of the financial year.

5. Scrutinising funding applications of NGOs and recommending or rejecting them

6. Releasing funds to NGOs on the basis of parameters set up by the HLC.

7. Imparting training to instructors providing training in the NGOs.

8. Ensuring the safety/upkeep of equipments purchased through non-recurring grants by the NGOs.

HIGH LEVEL COMMITTEES (HLC): These High level committees are also established by the DTTE, as a specialised group responsible for setting up policy and roadmap for implementation of this scheme. They were responsible for selecting the number of beneficiaries, areas of scheme, modules under which training would be operated, and selecting the syllabus for the various courses. Apart from this these HLCs determined the outcome to be achieved by each stakeholder and setting parameters for monitoring their achievements, eg: It

is this group which set the minimum percentage of trainees that needed to pass examinations and get the certificates certified by the NCVT. Apart from these they also:

1. Conduct visits to the training centres of NGOs and the supervisory institutes to assess the effectiveness of implementation of the scheme.

2. Keep a check on the quality of monitoring being conducted by the supervisory institute and to give a feedback independently to the concerned officers of the Department of Training and Technical Education.

3. Disseminate information to the public on the operation of the scheme.

4. Suggest measures for ensuring that the funds allocated under the scheme are being spent effectively and efficiently.

5. The high level committee will approve the annual plans submitted by the NGO concerned, as may be modified by the supervisory institute and in consultation with the concerned officers of the department.

This theoretical framework shows that the TECOS had a multi-tiered approach towards imparting technical education to the impoverished and the needy, where the entire structure of this plan rested on an intricate mechanism of co-operation and checks and balance between these various operating groups but the overall aim of the plan had a holistic approach to integrate technical education to meet the livelihood needs of the underprivileged sections of the city's populace and to meet the needs of industries as well, aiming to work out a balance between industrial growth and social welfare.

FUNDING PATTERN

Under the TECOS, NGOs have their grants funded, administered and monitored the Department of Training and Technical Education, its sub-ordinate offices or agencies. The following

pattern of funding / payments would be put in place for effective implementation of the scheme at various levels:

- In the first quarter (three months period since starting), no advance will be paid towards recurring expenses. However, an amount up to Rs. 30,000/- will be paid in advance in respect of grant for one-time non-recurring expenditure based on production of a suitable guarantee. However, in case of the need for more equipment intensive courses the High Level Committee may increase the non-recurring grant up to an amount of Rs. 60,000.

- At the beginning of second quarter (After expiry of three months of operation), 50% of amount will be paid in advance subject to satisfactory performance of operation of first quarter. Rest of the 50% amount for the quarter i.e. period of operation of 3 months will be released at the beginning of second month of the quarter. The release of funds will be at Institute level.

- The payment of grants for the third quarter will be made subject to the condition that the operation of first quarter was satisfactory (results of examination conducted by NCVT/SCVT will have to meet the criteria of assessment set by the high level committee/ Department). A minimum percentage of total successful trainees in the said examination is expected to be at least 40%.

- The payment of grants for the fourth quarter will be made subject to the condition that the operation of second quarter was satisfactory and so on. The similar criteria as of third quarter will be observed before releasing the grant.

- For the operation to be continued for next year the NGO has to submit an application seeking extension of the contract at least 1 ½ months before close of the year's last quarter. Based on an overall assessment of performance of the NGO, the high level committee/department will take a decision regarding extension of services to the NGO and contract period thereof.

- Funding under the scheme is normally provided on an annual basis, and therefore the maximum period of each grant is twelve months. Though the prospect of funding available to the NGO is for a period of 3 years NGOs will be required to submit a continuation of funding applications annually, at least 3 months before close of the year.

MONITORING AND EVALUATION

As per the DTTE guidelines all NGOs which enter into an agreement to be a part of this programme will be accountable for the achievement of certain outcomes and will specify terms and conditions for effective service delivery and accountable for the use of public funds. For this purpose constant monitoring and evaluation is carried out of the performance of the NGOs by the HLC and the supervising institutes. The assessment will be carried out to establish the performance of these NGOs under the following heads.

1. The achievement of the overall aims and objectives of the program.

2. Compliance with specific terms and conditions of the Agreement.

3. Meeting targets for specific inputs, outputs and outcomes.

4. Conforming to the prescribed service standards.

5. Financial management.

All NGOs have to submit frequent written reports describing activities and certifying achievements of specific outputs. It may include regular meetings or compliance with local Training and Technical Education data collections. All NGOs who are currently receiving grant funding are eligible to apply for continuation of funding. Continuations of funding applications for the supplementary grants are to be lodged with the Department for appropriate action one and half months before commencement of the year for which funding is sought. Application for continuation of grant funding in every third quarter from the year in which funding commenced would be tied to attainment of satisfactory percentage of trainees, having attained SCVT certifications during the first quarter of that year, as per norms set by the high-level committee at the Headquarters. All applications for new and continuation of grants under TECOS are submitted to the Department of Training and Technical Education. Assessment of these applications would be done by a duly constituted selection committee/ high level committee and based on such assessment the committee will make its recommendations to the concerned officer designated by the Secretary (Training and Technical Education).

TECOS AND ITS ACTUAL OPERATION: A CASE STUDY OF KALYANAM

From this general conceptualisation of the TECOS, it seems a very well-organised integrated approach to render technical training to the impoverished sections through grass-root organisations like the NGOs. The various institutes aimed at overseeing and evaluating every step of this operation and proposing changes wherever necessary seem also well planned. The accountability of these NGOs in terms of utilisation of the grants as well as the quality of skill transmitted to the local community gives the impression of this scheme being very well laid out and effective for the target

groups. But we all know the discrepancies that often exist between a normative framework and actual experience, what seemed important to me was to locate the manner in which this scheme was actually being implemented. As already told earlier, this scheme was introduced in the year 2008, and initially 11 NGOs were selected to impart technical education in various arenas. A list of these NGOs selected and the training imparted by each will be given in *APPENDIX 1.* For my research, I took up the NGO named Kalyanam located in the region of SangamVihar, in South Delhi. This particular NGO was selected as one of the first 11 NGOs to be part of TECOS. Kalyanam ran three courses namely Basic electrical training, Bedside attendant and Nursing assistant. The ITI of Malviya Nagar was the supervising institute for this NGO. Kalyanam basically ran these courses from its TECOS centre located in SangamVihar and the students were taken from the impoverished local community in and around SangamVihar.

An interview with the director of Kalyanam, R.P.Prashant revealed a very interesting point. Though the maximum period for which a NGO could operate under TECOS scheme was three years, Kalyanam had voluntarily opted out of this scheme after two years itself. The programmes being taught as part of TECOS received a positive response from the local community with enrolment rates for the three courses being of this order:

COURSE	STUDENTS ENROLLED	COURSE	STUDENTS ENROLLED	COURSE	STUDENTS ENROLLED
BASIC ELECTRICAL TRAINING		BEDSIDE ATTENDANT		NURSING ASSISTANT	
BATCH 1	40	BATCH 1	50	BATCH 1	51
BATCH 2	38	BATCH 2	50	BATCH 2	58

BATCH 3	39			BATCH 3	55
BATCH 4	40			BATCH 4	52

Thus the enrolment rates show that there was a great positive response from the local community regarding these training classes. All students were taught in two shifts per batch, and classes were held for one batch in the morning while for the other batch from the evening. The most appealing factor of TECOS which attracted a large number of people to this programme was that the training in a particular course promised a certificate to the trainee on successful completion which in many cases was what the trainees needed to get some job to sustain them. On talking to the project co-ordinator of Kalyanam; Kanchan Gera, revealed that most people who came for a course say on basic electrical training had most of the ideas regarding electrical work, what they needed was a certificate attesting to their knowledge and this is what TECOS provided. Though it would be impractical to think there were no drop-outs, in all courses some people did not end up completing the course. However it was the responsibility of the NGO who had built up a connection of serving the local community to try and bring back those who had left ,though at all times by their own admission they were not completely successful in bringing back all those who had decided to drop.

PROBLEMS WITH THE PROGRAMME

But having repeated interviews with various people associated with the TECOS programme begun to show a host of complex problems which were plaguing this otherwise holistic approach towards technical education for the underprivileged. In this section, I will try to sequentially lay down the various problematic aspects which could be seen in the functioning of TECOS.

One of the important objectives of the plan was to create a pool of skilled group who could meet the skill requirements of the industries, and as already mentioned earlier it was the responsibility of the various NGOs to enable the industries to understand the potential and opportunities for reorganizing their production processes in order to derive benefits from decentralized production through the beneficiaries of the program. It was also their responsibility to try and bring about a productive tie-up between the potential employers and the beneficiaries and also between financial institutions and the trainees. All this was done to try and ensure a smooth assimilation of the people benefitted from TECOS into the job-market but in most cases the NGOs were not in a position because of their other activities and tie-ups to bring about a regular tie-up between industries and the trainees. In most cases the placement of these candidates was not wholly supervised by the NGOs and it was up to the trainees themselves to look for employment opportunities, though if industries showed interest in procuring labour from the beneficiaries of this programme, they could approach these NGOs and then interviews could be arranged. But in most cases this did not happen. In the case of Kalyanam itself only the first batch of Basic electrical had placement interviews conducted through Kalyanam for a host of employers. Most students looked for employment opportunity themselves, while many collaborated among themselves facilitating self-employment opportunities.

This brings us to yet another important issue as to how interested were the industrial units in absorbing these TECOS students into their fold. It has been argued that what companies are looking for are individuals with ability to communicate, solve problems and do team work, not just know narrow vocational skills, (Bennell, P&Sergestrom, J.) Since the training imparted as part of TECOS was a 3 month crash course it only included technical training and this may not have met the requirements that the industries were looking for. This could lead to a basic reluctance in taking trainees from this scheme within industrial units.

Also, it must be remembered that the training given here unlike the training in Polytechnics and ITIs was for three months and not for 1-2 years and that too to people belonging to the underprivileged section,

so they were being given training of a kind which could just about get them a job to meet their livelihood. So, the training imparted could not be of the highest quality and therefore it would be unwise to expect these people to be absorbed into high paying jobs within industries. For instance, most trainees from Kalyanam who had received nursing assistant training worked within the monthly salary range between 2500-6000/-. While it is commendable to even ensure something of this sort for the needy, what I believe will benefit the beneficiaries of such a program would be a slightly longer training period , which should also include, not only technical education but also general skills and attributes that are useful across a wide variety of occupations. This is particularly important in the rapidly changing economic systems and would ensure a greater interest from employers to take the trainees of such program at slightly better wage rates. What I also believe is important is a degree of private sector participation in such endeavours in respects like designing of curriculum for modules for only then will the training imparted include the facets which are being looked for by the industrial employers in their employees thus guaranteeing better and fuller placement figures. Only such private-public co-operation can open up the job market to a larger extent for all the underprivileged who are being targeted by a scheme like TECOS allowing an improvement in their socio-economic conditions.

Under the TECOS scheme, examination was of two types, a written examination and a practical. The practical examinations were primarily held at an external centre. So, for a course like Nursing, the Practical examinations were held at various Government Hospitals where the doctors and other nurses tested the candidates, and it is regarding these practicals that I heard of some very disturbing incidents. According to Miss Kanchan Gera, who was the project co-ordinator for KALYANAM, at times the officials at these hospitals misbehaved with these candidates as they belonged from poor social backgrounds openly humiliating them or demoralising them. For many students, these practicals provided a sole opportunity to leave their immediate surrounding and interact with other sections of society. According to Kanchanji, at times these students would end up making a bit more noise than others, or show more curiosity than others which would be immediately met with stern rebuke or harsh criticism from the officials. And in the batch held for this course, in mid-2010, all the students passed the written

examination but at the practical, some students were asked for money by some of the members of the staff for conducting the practicals. No such provision is made for any such payments within the TECOS scheme, and when some of the students complained about this to their co-ordinator within KALYANAM, it resulted in the entire lot being failed in the practical exams. Not a single student passed the practicals, and as a result none could get the much coveted certificate which TECOS offered.

For many students these certificates were very important for they acknowledged the student as having completed a formal training course, and most employers recruited candidates on the basis of these certificates they possessed so when an entire lot was failed, it meant most of them failed to get the jobs they had hoped TECOS would end up providing them. The KALYANAM management argues that as a result of this incident they had to face the discontentment of the local community and it also disillusioned them about certain aspects of this programme following which KALYANAM opted out of this project. According to the director of Kalyanam, more transparency regarding the practical examinations are required and he suggested that it would be more convenient if the practicals were conducted by external examiners at the NGO centre itself. This would prevent any case of discrimination and exploitation of these underprivileged students. Here I would like to give the following figures. I have already given an outline of the basic government funding to various NGOs under the TECOS scheme and here I would like to give the per-month breakup of the expenditure incurred under TECOS for Kalyanam.

TABLE1

ITEM	COST INCURRED (per month)
Water and Electricity charges	2500
Rent	5000
Sanitation and Security	1000

Honorarium to Instructor	3000
Payment to Community mobilise	1500
Payment to Project Co-ordinator	2500
Administrative expenses	2000
Raw-Material	3500
Total	21000
Projected total	63000 (3 months)

The overhead fund granted to Supervising institute and the High Level Committees were 15% and 5% of the total funds appropriated for this scheme.

TABLE 2

Basic electrical training	Students Enrolled	Appearing Students	Students passed	Pass Rate For appearing students	Pass Rate For enrolled students	Cost per student	Cost per certificate
Batch 1	40	37	33	89%	83%	2325	2818.18
Batch 2	38	33	27	82%	71%	2447.4	3444.44
Batch 3	39	32	23	72%	59%	2384.6	4043.47
Batch 4	40	34	Exams were not held				

Nursing Assistance	Students Enrolled	Appearing Students	Students passed	Pass Rate For appearing students	Pass Rate For enrolled students	Cost per student	Cost per certificate
Batch 1	51	40	33	85%	65%	1823.52	2818.13
Batch 2	58	51	45	88%	78%	1603.44	2066.66
Batch 3	55	46	39	85%	71%	1690.90	2384.61
Batch 4	52	44	0	0	0	1788.46	DIV/0!

Bedside hospitality	Students Enrolled	Appearing Students	Students passed	Pass Rate For appearing students	Pass Rate For enrolled students	Cost per student	Cost per certificate

Batch 1	50	43	31	72%	62%	1860	3000
Batch 2	50	38	23	61%	46%	1860	4043.43

Before we look into some of the issues that these figures reflect on the TECOS programme as carried out by Kalyanam, here it would be pertinent to add that the modules were taught by instructors who had to be diploma holders in the course they were teaching from a polytechnic institute, if not a degree holder. However they were paid a meagre 3000/- for their duties. This according to many of the instructors was not enough. We have already seen that theoretically all funds had to be disbursed after every 3 months on proper assessment of the performance of the various NGOs, a duty entrusted to the various supervising institutes. According to MR. Prashant, this was rarely the case and often funds were disbursed at the end of the year, which made it very difficult for NGOs to carry on the programme entirely with their own funds. However, on questioning the co-ordinator of the TECOS scheme within DTTE, and the secretary of DTTE Mr Narendra Kumar, it was found that the NGOs selected were all such bodies with sufficient capital and infrastructure so that they could carry on with the programme even if there was a slight delay due to administrative complexities in disbursing the funds at exactly the appointed time. Though what seemed surprising is that at times the delay could even extend for a whole year. The NGO Kalyanam primarily enrolled students for its courses from the surrounding underprivileged community but only a certain amount of students could be enlisted. So there was a screening process through which students were enrolled, and primarily students who had completed elementary education or finished their tenth were given first preference for being selected for these modules.

Another issue to be discussed here is the role of the supervising institutes. Kalyanam was supervised by the ITI-Malviya Nagar. I have already discussed the role played by these institutes. Now, according to the

members of Kalyanam part of the TECOS programme the ITI regularly visited them and observed the quality of education being meted out to the students, the response of the students to the various programmes, the pass ratios, the handling of the Government funds by the NGO groups and all other such activities. At times teachers from the ITIs were sent to teach certain specific aspects to the students and there was a generally good feedback regarding the role played by these institutes.

Also, certain members associated with the TECOS programme at Kalyanam also feel that the funds allocated by the Government for certain modules within this programme was not enough. Though basic computer training is not taught as a module by Kalyanam, but when asked Miss Kanchan stated that for such a course to be successfully implemented, what is required is a minimum of 5-6 computers for each shift of 25 students. (Each batch in the programme is divided into 2 shifts of 25-30 students) For this, she believed a grant of 63000 was not enough. For providing a more nuanced training in each course, she felt the Government had to sanction larger monetary grants to the NGOs.

The statistical figure I have provided above shows that the students of the fourth batch of Basic electrical training did not have their examinations conducted. This batch was trained in the early half of 2011 and 40 students were enrolled while 34 of them were there at the time when the exams were supposed to be held. Students leaving their courses mid-way for some reason or another was a basic feature but their numbers were not huge. At times the NGO tried to bring back the students to complete their course but some students never returned. Anyway, moving ahead the director of Kalyanam and the project co-ordinator Mr.Prashant and Miss Kanchan both stated that the DTTE were happy with their previous results of this course and had given them the green signal to conduct this course as well. But at the time of the examinations, the admit cards of the students never came. When the NGO reported this to the DTTE, they persisted that this course was not supposed to be taught that season by Kalyanam and hence they were not entitled to conduct examinations. If indeed this was the matter the NGO group still complaints that the information should have been given to them much earlier than at the end moment while a conversation with officials within DTTE ,they asserted the

previous year's performance of this particular NGO in this course was below satisfactory levels and hence the decision was taken. However if so, why was this not information shared with the concerned NGO earlier? There were no definite answers given to this question. This entire incident happened at around the same time when no students of this NGO under nursing assistant passed their examinations. Both these incidents saw the underprivileged students suffering as not only were their labour of 3months unrecognised, there was no opportunity for them to get their training certificates which affected their chances of getting decent employment in the job market. The NGO group was directly answerable to these disaffected students as they had been closest to the local community during this entire programme. According to the management committee of Kalyanam both these incidents and the aftermath of these vis-a-vis the local community disappointed the NGO with the functioning of the DTTE. Though Kalyanam still believes that TECOS is a very well-conceived plan and is very useful for the underprivileged community but certain shortcomings of this plan needs to be carefully looked into for its better implementation of this project. It is noteworthy that following these two incidents Kalyanam withdrew itself from the TECOS plan.

Talking to students who have been part of this plan revealed another problem faced by the trainees. One of the students whom I interviewed (name not revealed on request) told me that though the certificates are supposed to arrive after a month of the declaration of the results, but in most cases there is a huge delay between the declaration of the result and the coming of the certificates. This delay makes it difficult for the students to get a job as most companies would not recruit the beneficiaries of the programme without the accompanying certificate. For most students this certificate is a formal acknowledgement of their successful completion of training and they admitted the most important requirement for good placement. In that case the delay with these certificates makes it difficult for the students to get better placements. It is also another glaring testimonial to the fact that the successful operation of this scheme requires a better co-ordination between the various agencies involved at the operational level of this scheme.

COST COMPONENT

While working out the statistical figures given above, I actually stumbled upon one reason why the DTTE might not have wanted Kalyanam to carry on with the Basic Electrical course. Here, it is important to lay down the DTTE's funding pattern as per this scheme. The DTTE gave an amount of 63000/- per NGO for a 3 month programme, which means that the NGO received Rs.21000p.m. The Table 1 above clearly indicates how Kalyanam spent this amount allotted to it per month. An amount up to Rs. 30,000/- is paid in advance in respect of grant for onetime non-recurring expenditure based on production of a suitable guarantee. Only in certain cases, for crafts requiring intense machinery 60000/- was paid in advance. Kalyanam got thus, a sum of (63000+30000= 93000) for a 3 month course. For a course like Basic electrical training, if we divide this amount with the number of students who passed in each batch, then we get the Cost incurred by the Government on each student for giving a certificate. This has been outlined in the last column of Table 1, under the rubric COST OF CERTIFICATE. From this, we see in this course carried out in Kalyanam, due to the decline in the number of students who passed per batch there was a tremendous increase in the cost incurred by the government for each certificate, notably it increased from Rs.3444 in Batch 3 to Rs. 4043 in Batch 4.A similar jump in Cost per certificate was also seen in the second batch of Bedside Assistance. This may have made a particular course convened by a NGO comparatively more costly than other courses in the same NGO or the same course run in other NGOs forcing the DTTE to withhold the NGO from carrying on with this course. This may be the reason why after two batches the course of Bedside assistance was discontinued in Kalyanam and also why the DTTE refused to allow Kalyanam from conducting examinations for the fourth batch of this course. However, there rests no doubt that the intimation could have been given to Kalyanam before they admitted students to this course and this could have prevented the sort of misunderstanding which happened later. This also revealed that the entire system which ran on intrinsic co-operation between various forces could break down due to failure in systematic communication.

SUGGESTIVE MEASURES

There is no doubt that the TECOS was a very well-conceived scheme to provide a basic technical training to underprivileged children giving them an opportunity to obtain a formal certificate of training and based on this try and eke out a living for themselves. The entire effort is really commendable but every scheme no matter how good it may be will run into problems at the time of its operation, same goes for TECOS without exceptions. I have already tried to enumerate above some of the problems encountered by a scheme like this, and based on this I have also mentioned some remedies that have been suggested to me by the concerned agencies, which I believe should be given due consideration within this scheme to make it more sound and holistic. I would again list down these remedial measures here in this section point wise so as to make them all the more precise.

1. Firstly, I feel there is a need for the various NGOs to be more active in bringing about tie-ups between industries, banks and the beneficiaries of this scheme to bolster up the placement opportunities for the students who were part of this scheme.

2. Also, I feel a slightly longer training period and imparting of not just technical skills but education of a more general nature would make such a programme all the more useful to the trainees.

3. A greater participation of the private sector in this scheme, either in preparing the curriculum of the modules or selecting the courses to be taught or in the management of this scheme would help in designing TECOS to create a man-force more suited to meet the requirements of the private sector, benefitting both the private sector and the trainees.

4. Participation of the private sector would also make it possible to appropriate funds from the private sector for this scheme which I believe could be used for giving better salary to the instructors and hence recruiting better instructors for this scheme. It could also be possible then to provide larger financial grants to the various NGOs as I believe at times and for certain courses the funding of the government is insufficient.

5. I strongly feel, that the present system of a two-tiered examination system as part of TECOS is a very good step with a balance between both theoretical and practical knowledge but provision should be made for the conduction of practical examination within the NGO facility itself as only then it can help in minimising any chances of exploitation.

6. Finally, I feel this scheme was conceived based on a multi-tiered level with close co-operation between the DTTE, the HLCs, the Supervising Institutes and the various NGOs being the foremost requirement for its success, and it is important that the co-ordination between these groups continue, for only then will it be possible to run such a program smoothly. Some of the problems I have discussed like the delay in getting the certificates or the case where examinations could not be conducted for a batch of students due misunderstanding between the parties involved all could be avoided if only the various groups worked in close co-ordination with each other keeping the well-being of the students their primary concern. It should be remembered that all such problems will only have an adverse effect on the underprivileged students for whom this plan was launched, which would make this entire scheme meaningless.

CONCLUDING REMARKS

Just like I do not often know how to introduce a topic, I am poor if not poorer in concluding a topic, but I guess it is important to round up my attempted study with a concluding remark. Undoubtedly, the plan of TECOS was a very good initiative to try and benefit a section of the Delhi population which cannot compete with other more affluent groups. It was an attempt to give the poorer sections of the population a chance to acquire technical training and through it try and earn a livelihood. The trainees did not have to pay for getting trained so the plan can be termed as a social-welfare scheme on the part of the Delhi Government. To reach out to the populace the help was taken of the NGOs who worked in close proximity with the local community. However there were other groups to oversee the activities of the NGO and report to the Government. Every plan no matter how well framed will run into problems, and so has the TECOS. But what I have tried here is to evaluate the plan by considering one NGO group. In this way, I felt I will be able to see the problems at not a mere institutional level. I could get into touch with the students the trainers, the programme co-ordinators and the directors and this helped me to try and get a grasp of the problems at the management level to the level of the students.

In my very first interview with Mr.Prashant the director of Kalyanam, he told me that I could get a hang of the problems faced by the administration while talking to him and to know the problems of everyday I realised I had to meet the people who were the soul of this scheme-the students and their trainers. It is very true, the numerous stories I heard from the people I met and interviewed across the duration of this project gave me a better glimpse of the weaknesses and strengths of this scheme. While there were many stories of hope and of joy recounted by people who found this scheme as having changed their life by having uplifted them through knowledge and employment, there were also stories of exploitation, of dreams not fulfilled. I know, I haven't been able to do justice to those numerous people who spoke to me and their accounts, but all this allowed me to see not just TECOS as a plan of the government which comes and goes. Rather it showed to me a dynamism of a group of society whom we term as 'marginalised', 'subaltern'. They are not blessed to be born as most of us are, well fed and well clothed

and well educated but who have no desire of giving up, and who dream of making a name for themselves as well and all these schemes, like TECOS which try in their own small ways to give a wing to their aspirations and hopes are commendable. In a final assessment of TECOS, I would say if the authority looks into the problems that this scheme faces,(some of which I have mentioned here), and takes steps to deal with them it will make TECOS all the more strong and effective in providing a ladder for these sections of our society to climb towards achieving their dreams.

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APPENDIX-1

List of NGOs enlisted under TECOS scheme in 2008

S/NO	Name and address of NGO	COURSES RECOMMENDED	Supervising institute
1.	EktaShikshaSansthan	84-Tailor ladies	ITI Narela
		111-Screening Printing	
		126-Makeup artist	
		168-Desk top publishing	
2.	Tamoha	117-House wiring	Pusa Polytechnic
		167-computer fundamental-MS office, internet and soft skills	
3.	Vidhya Welfare Society	167- computer fundamental-MS office, internet and soft skills	ITI Khicharipur
4.	Kalyanam	115-basic electrical training	ITI, Malviya Nagar
		163-hospitality assistant	
		164-bedside assistant	
5.	Active Education Society	153-sales person (retail)	BTC Pusa
6.	Society for advancement of village economy	117-House Wiring	ITI, VivekVihar
		167- computer fundamental-MS office, internet and soft skills	
		158-General Sewing m/c operator	
7.	MaaRatni	164-bedside assistant	ITI, NandNagri

8.	Rural Education & Welfare Society	153-sales person (retail)	GB pant Polytechnic
9.	Data mation Foundation Charitable Trust	170-Hardware assembling trouble shooting and basic networking	Ambedkar Polytechnic
10.	SomDatt Foundation	167-computer fundamental-MS office, internet and soft skills	ITI NARELA
		168-Desktop publishing	ITI NARELA
		170-Hardware assembling trouble shooting and basic networking	ITI NARELA
11.	Baba SahebAmbedkar Industrial Training Center	115-Basic electrical training	ITI Jail Road
12.	Jan Jagariti Educational Society	77-Basic sewing operator	Kasturba polytechnic
		124-basic of beauty & hair dressing	
13.	Delhi Competitive & Vocational Society	115-Basic electrical training	Ambedkar Polytechnic
14.	D.A.V.Computer Education Society	153-sales person (retail)	ITI, Tilak Nagar
		163-hospitality assistant	

15.	G.D.S.Society	5-Plain Weaving on Frame Loom	GND Polytechnic
		8-Advance Weaving (Cotton/Polvster)	
16.	Ray Welfare Trust	44-Basic automotive servicing (2-3 wheelers)	BPIBS
17.	NariRakshaSamiti	84-tailor ladies	ITI, MORI GATE
18.	Jahan Vocational Training Ins.	84-tailor ladies	ITI, NAND NAGRI
19.	The Divine Light	70-Hand Embroider	ITI, SIRI FORT
20.	MahilayenPragati Ki Ore	84-tailor ladies	ITI Pusa
		85-tailor gents	
21.	ShriSai Baba Technical Education Society	77-Basic sewing operator	ITI, JAFFERPUR
22.	Shape India	86 -tailor suit	MEERA BAI POLYTECHNIC
23.	International Promoters Council	47 -R&O of 2 wheelers (motor cycle)	ITI, DHEERPUR
24.	All India Society of Education	167-Computer Fundamentals, MS-Office, Internet & Soft Skills	ARYABHAT POLYTECHNIC
		68- Desk Top Publishing	

		170-Hardware Assembling, Troubleshooting & Basic Networking	
25.	**C.V.R. ParthsarthiWel. Charitable Society**	**167-Computer Fundamentals, MS-Office, Internet & Soft Skills**	**ITI, DHEER PUR**
26.	**Sundar Amar Sheel Charitable Trust**	**77-Basic sewing operator**	**ITI, ARAB KI SARAI**
		153-sales person (retail)	
		163-hospitality assistant	
		167-computer fundamental-MS office, internet and soft skills	