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ANTHONY MICHAELIDES

VOCATIONAL COOPERATIVE EDUCATION IN CYPRUS, 1960 - 1986

(In Two Volumes)

VOLUME II

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A Thesis submitted in fulfilment of the requirements of
Doctor of Philosophy of the University of Durham.

JUNE 1987



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CHAPTER NINE.

THE HOTEL TRADES INDUSTRIAL TRAINING PROGRAMME.

1.0 INTRODUCTION.

As indicated in the previous chapter, the Hotel Trades Industrial Training Programme (H.T.I.T.P.) is the oldest cooperative programme in the island. A significant feature of the programme is that, unlike the I.T.P.U.S., which was incorporated in the curriculum at a later date, the H.T.I.T.P. has been an integral part of the hotel training courses since their inauguration in 1963. The hotel trades were, thus, singled out from the beginning for special treatment as regards cooperative industrial training. Furthermore, as will be explained in this chapter, the hotel trade courses, together with the dressmaking courses, were the only vocational courses which were not extended to six years, either during the unification of technical and vocational courses, or with the introduction of the "part-time" sixth year programme(1). This omission gave rise to the hotel trade courses being described by some as the "Cinderellas" of Technical Education.

Despite the above, the main hypothesis that will be examined in this chapter is that although the hotel trade courses were seemingly discriminated against, they



arguably developed the most successful of all industrial training courses. The H.T.I.I.P. suffered of course from many of the dysfunctions that affected all other cooperative programmes. The hotel training programme, however, was particularly favoured by certain conditions and factors which contributed to its more healthy development.

The treatment of the subject in this chapter will be as follows. There will be an outline of the introduction of the hotel training courses in a historical context. Special emphasis will be given in this section to the community support that the first hotel school enjoyed. There will then follow an analysis of the effect that the establishment of the Hotel Catering Institute by the Ministry of Labour had on hotel training programmes. Of particular significance in this respect is that the deliberations that led to the creation of the H.T.I. support the general hypothesis that there was a continuous acrimony between the Ministries of Education and Labour which made them find themselves, constantly, in opposite camps.

In the subsequent section there will be an examination of the differences between the Teachers' Trade Union and the Department of Technical Education on the nature of the hotel industrial training programme. Finally there will be an analysis of the findings of a survey in which the students' views were sought on some of the main

issues concerning their industrial training.

2. The Development of Hotel Training Courses.

2.1 Introduction of the Courses.

The introduction of hotel training courses in vocational education was first discussed at a meeting held at the Larnaca Vocational School on the 12th February 1963. The meeting was attended by Mr. Syrimis, Director of Technical and Vocational Education, Mr. Montis, Director of Tourism, Mr. Evryviades, manager of the "Four Lanterns Hotel", and a member of the Hotel Owners' Association committee, and Mrs. Protopapas, Inspector of Education. The reason that the meeting was held at Larnaca Vocational School was that it was considered that this school was perhaps suitable to offer hotel training courses.

At the meeting it was decided that it was imperative to set up courses for hotel training as the general standard of the hotel trades in the island was very low. The meeting also made the following recommendations:

(a) Priority should be given to the specialisations of
(i) chambermaids and waiters, and (ii) cooks and confectioners.

(b) The vocational school Larnaca was an appropriate place to offer such courses. However, as it was deemed necessary for the hotel courses to be residential, and

as the school had no facilities to house the students, halls of residence needed to be built.

(c) No problem for staffing the school was envisaged, as there were already a number of people studying hotel trades on scholarship.

(d) The headmaster of the school and an inspector to be sent to Greece to investigate the organisation and curriculum of hotel training courses in this country.

(e) Mr. Fuller, an English specialist on hotel training who was to visit the island shortly to be asked to offer his views on the subject.(2)

In due course, the Office of Education of the Greek Communal Chamber endorsed the recommendation and a decision was taken to initiate the hotel courses as from September 1963. Soon afterwards, in line with above recommendations and in order to help pave the way towards the implementation of the new programme, the inspector Mrs. Heleni Protopopa and Headmaster of the Larnaca Vocational School were sent to Greece where they visited hotel schools and studied their curricula. On their return the two officers submitted an outline of the new courses which was approved by the authorities.

(3)

Thus, as at least on paper, things were ready for the start of the new course, the Greek Communal Chamber, in June 1963, issued the following press release:

The rapid development of tourism in the island will necessitate the erection of new hotels in the

near future. These will require staffing with suitably trained personnel. The training of such personnel has not, up to now been possible in Cyprus. For this reason both the Greek Communal Chamber and the Government are trying to remedy this situation by establishing hotel schools in the island.

This year, for the first time, the Vocational School in Larnaca will offer two year courses (a) for cooks, and (b) for waiters. Both these trades have excellent prospects and a very bright future.

The courses will be of a two year duration. The candidates should have completed at least the second year of a secondary school, and they should be under 16 years old. As the number of places is limited, candidates will be selected on the strength of an examination in Greek and Mathematics. The appearance, the personality and courtesy of candidates will also be taken into consideration.

The curriculum for the course will include, in addition to the theoretical and practical specialisation subjects, general education subjects like Greek, Geography, foreign languages etc. The programme will also include industrial training in various hotels in the island during the summer vacation and under the supervision of the school.

Those who successfully complete the course will be able to work in the hotels, restaurants etc., or they will be able to pursue their studies in a higher Hotel and Catering Institute which will be established in Nicosia. (4)

The announcement, however did not produce the expected results as parents were hesitant to send their children to be trained as cooks and waiters whom they regarded as mere servants. In order to fight the prejudice and get the hotel school off the ground, the Headmaster and his hotel instructors had to go out and convince people on a personal basis. They thus visited villages and spoke to parents and potential pupils in the village coffee shops and in their homes. After much effort, eventually, they managed to find enough students to form a class of twenty students, half of whom would be trained as cooks and the other half as waiters.

There were other difficulties as well. At the beginning the funds earmarked for the course were quite inadequate to buy the necessary equipment for the kitchen workshop and the restaurant. So again the headmaster and the instructors, after spending the little money allocated for the purpose as wisely as they could, had to beg or borrow equipment from various sources in order to cover the essentials required for the course. At the same time, in order to give students practice and a taste of industry at every available opportunity, instead of holding shop lessons at school, students were sent to hotels where they worked side by side with the hotel staff. For this purpose hotels were encouraged to ask for groups of students to work at the hotels on the odd days when they held special functions when extra hands would be valuable.

Thus, despite difficulties, the school not only survived its first year but, within this short period, even managed to make itself popular with the hotels. The school also came to be known by the people of Larnaca and was respected for what it was trying to do. (5) An indication of the school's success was that, according to a school report, in its second year of operation, the demand for places at the school was so high that some

students had to be turned away.

The report further states that the hotel trade courses were of four years duration, the first two years of which were for general education and the final two years for specialisation. (6) According to the report the course also provided for six months practical training in first class hotels all over the island. The report finally added that all the teaching staff were suitably trained and the prospects of the hotel school seemed to be very good. (7)

2.2 Industrial Training in the Hotels

As indicated above an important feature of the hotel courses was that they included compulsory industrial training for all students. The programme of training was put into effect as from the very first year of the operation of the courses. The details of the industrial training programme were the following:

- (a) Industrial training of students took place during the summer months. (8)
- (b) Students placed in hotels at some distance from their homes, lived in the hotels.
- (c) All students were offered board by the hotels.
- (d) Students who lived in the hotels had £2 per month deducted from their salaries.
- (e) Students were required to serve as waiters and assistants in the kitchen.
- (f) The conditions of service were in accordance with the existing Ministry of Labour regulations.

(g) The Headmaster of the school and the Head of the Hotel and Catering department visited the hotels in order to be informed by the managers of the hotels on the progress and conduct of the students.(9)

Both the written evidence and the interviews carried out by the researcher support the hypothesis that the programme in the first years of its operation was successful. There were very favourable comments from the hotel keepers, and the headmaster and instructors who visited students at their place of work reported that students were greatly benefitting from the work experience.(10) Perhaps an indication of this success was that many hotels requested the school to allow them to employ students during the following Christmas. The school granted the request and arranged for practically all students of the second year to work in the hotels between the 23rd December and the 6th January.(11)

2.3 Extension of the Period of Training.

Until 1969 the training of students in industry continued to be confined strictly to school vacations, which in the summer were between the first of July and the 15th of September. Hotel owners, however, gradually come to consider this period to be too short. They complained in particular that the first of July was far too late for the students to be placed in the hotels, so they tried to convince the Ministry of Education and the

school to release students from the first of June. The Ministry of Education, however, was very reluctant to agree to the request because, firstly, it regarded as a matter of principle the curtailing of the school year as unacceptable and dangerous, as it would create a precedent, and secondly, such curtailing of the school year would be contrary to the existing legislation which specifies the dates of commencement and the ending of the school year. However, as will be explained later, when the Hotel and Catering Institute was established in Nicosia and the Institute offered to its students longer periods of training in industry, the Larnaca school was forced to reconsider its position.

Thus, in April 1969 the Headmaster of the school, in a letter to the Director of Technical Education, requested that the school calendar be modified so that the school year finish on the 31st of May in order that students could start work in the hotels on the first of June. The headmaster justified the change on the grounds that in this way the school would offer a service to the tourist trade.(12) In order to make up for the time that would be lost, the letter suggested that the students would have two hours of lessons every afternoon during the first three weeks of May.(13) For these lessons teachers would be paid extra at the over-time rates. During the three weeks, the headmaster further suggested, students would be fed at the school. Thus, the letter concluded, the school calendar would be

modified as follows: Lessons would finish on the 20th of May, instead of the 8th of June, the examinations would be carried out between the 22nd of May and the 31st of May, instead of between the 10th and the 25th of June, and students would, in this way, be able to start work on the first of June, instead of the first of July.(14)

The above details are given in order to make it clear to the reader that every effort was made, on the part of the school, to show that, at least on paper, school lessons would not suffer as a result of the change. Probably it was on the strength of the above justification that the Director approved the change. The approval however was not granted in writing, as such official statement at the time would have necessitated an amendment to the law. This would have involved a special proposal to be drafted by the Ministry of Education in conjunction with the office of the Attorney General. The proposal would then have to be approved by the Council of Ministers and subsequently enacted by the House of Representatives. The Ministry of Education, obviously, was not prepared to go to such lengths in order to curtail the school year for a few students. The Director of Technical Education, therefore, perhaps acting in a pragmatic way, chose to grant the request his silent approval.

Some years later the Teachers' Union was to challenge

the very legality of the training programme on the grounds that the Ministry of Education had no right to send students to industry when, according to the law, they should have been at school. Nevertheless, once the shortened school year was introduced, it continued to be applied for over fifteen years before the decision for its introduction was challenged. Furthermore, even the pretext of the extra afternoon periods during the last month of schooling was dropped after it had operated for two years.(15)

2.4 Community Support for the School.

As indicated in the previous section, probably one of the reasons for the success of the school was that it enjoyed the support of the town of Larnaca. This support, which, as will be explained below, was far beyond what may be normally expected from a community, was due to historical and social reasons.

The seaside town of Larnaca, in the not too distant past, was affluent and generally regarded as the centre of cultural life in the country. One indication of the high status of the town is the fact that it housed all foreign consulates in the island. Larnaca also had what

was arguably the most important port in the country which made it a significant centre for commerce and industry.

Around the turn of the century, however, Larnaca started gradually to decline. As the British made Nicosia the administrative centre of the island, the embassies moved to the capital. At about the same time the Famagusta and Limassol ports, which both had a richer hinterland than Larnaca's, gradually overtook the Larnaca port in significance. The people of Larnaca were naturally disappointed with the decline of their town and repeatedly blamed the British Administration for neglecting it.

The residents have not forgotten their town's "glorious" past, and they generally feel very strongly for their town's fortunes. This feeling of localism was perhaps at its strongest at the time of the declaration of the Republic in 1960. The reason was obvious; the people of Larnaca after years of frustration and disillusionment under the British Administration, looked forward to a new era under the Republic. And of course they were not prepared to allow the continuation of what they perceived to be the unfair treatment of their town. So they were ready to fight for their rights.

It was in this climate that the Hotel and Catering course was established in the Larnaca Vocational School.

At first the community did not take much notice of it. However as the school started to become known, and as it started to receive favourable comments, the town authorities recognized that the school could promote the town's prestige and interests. After all, it was the first hotel school in the island and a good omen for the tourism boom they expected.

Another factor that added to the community involvement in the school was that the new school was housed in magnificent new premises, in the centre of the town, the erection of which was funded entirely by the bequest of the town's benefactor Mr. Demetrios Dianellos.(16) The fact that the school included a large hall which was used for public functions and performances further promoted the ties between school and community.

Because of the above, the hotel school received a greater share of limelight than any other school in the town, and indeed in its early days, it was one of the most publicised schools in the island. An indication of the importance that the Larnaca people gave to the school were the visits paid to the school by the various dignitaries. Among these were Princess Herene of Greece, the Ambassadors of Greece, France, Italy, United States and the High Commissioner of the U.K., many cabinet ministers, members of parliament etc . A very special honour for the school was a visit by the President of the Republic on the 16th of May 1965.(17) It greatly

helped, of course, that all visitors were offered sumptuous meals at the school and were thus full of praises for the quality of meals offered to the public by the school restaurant.(18)

The intensity of the town feeling for the school was made evident when in 1965 the government decided to establish in Nicosia the "Central Hotel School", to be administered by the Ministry of Labour (19). The people of Larnaca saw the new school not only as a potential rival, but also as a real threat to the supremacy of their own hotel school. In order to fight the decision, a meeting was held on the 22nd of October 1965 at the Larnaca bishopric under the chairmanship of the bishop of Larnaca, which was attended by the members of the House of Representatives for Larnaca of all political parties, the members of the town council, and representatives of all associations, clubs and other groups. The meeting decided, inter alia, for a delegation, headed by the bishop, to visit the President of the Republic and present to him the following petition:

Your Beatitude,

The members of Parliament representing Larnaca, members of the Town Council, representatives of organisations, societies, clubs and financial, educational and other personalities of the town of Larnaca, having discussed during a meeting, held today Friday, 22nd October 1965 in the offices of the Holy Bishopric of Kitium under the chairmanship of his Grace the Bishop of Kitium, a report of the Larnaca School committee on its actions following the announcement by the Ministry

of Labour of its intention to establish a Central Hotel School in Nicosia, have decided the following:

a) That the people of Larnaca express their strong protest against the decision of the Cabinet of Ministers to establish a hotel school in Nicosia.

b) By the establishment of the above school, and especially by granting the students of the Nicosia Schools advantages not enjoyed by the students of the already well established and successful Larnaca Hotel School, the latter is sentenced to decline and possibly to closure. Those present at the meeting believe that technical education provided by the state, even if it is under the jurisdiction of two different Ministries should be uniform as regards the rights of students and in no way should render competitive the operation of the two schools.

c) The meeting believes that the school that will be established by the Ministry of Labour, under the cover of promoting Apprenticeship among those working in the Hotel Industry will in effect be an expensive project for the government, as its operation cost is estimated by specialists to exceed £30,000 annually.

d) If and when the creation of a new school in Nicosia is considered by you to be essential, in order to satisfy urgent requirements of the Hotel Industry, the meeting requests, that its operational programme is confined to the retraining of those working in industry. This programme should be of a temporary nature, as originally announced by the Ministry of Labour. The task of initial training of the youth for the hotel trades, on the other hand, should be left to the school in Larnaca which should be reinforced, so that it is able in the future to provide a greater number of graduates to the hotel industry.

e) The meeting expresses the hope that the Government will not wish it for the town of Larnaca to be deprived of an institution, which contributes to its progress and development, but on the contrary the Government will further strengthen it so that it can offer greater services both to our town and the hotel industry.

f) His Grace, the Bishop of Kitium, is authorised by all present at the meeting to sign and submit to you the present document.

(sgd.) ANIKIMOS OF KITIUM (20)

The meeting with the President took place on the first November and, in addition to the petition, the delegation pleaded their case, verbally as well, in a most forceful way. The matter was also reised at the House of Representatives. In spite of the opposition from Larnaca, however, the Central Hotel School was established as planned.

It is interesting to note that, as the headmaster of the Larnaca School at the time informed the researcher, the strife over the hotel school was fought on two planes. One was between the two towns _ Nicosia, the capital, on the one hand and Larnaca, the aggressive seaside town, on the other. The second struggle was between the two Ministries, Labour and Education. According to the headmaster - and others interviewed agreed with him - what carried the day was the dynamism of the Minister of Labour, Mr.Papadopoulos. Thus the general consensus of opinion of those interviewed was that, if it was not for him the Larnaceans would have won.

The establishment of the Hotel and Catering Institute by the Ministry of Labour, as will be explained in the next section, had a profound effect on hotel training in the island. Before proceeding, however, it needs to be

recorded that in the years that followed, the Ministry of Education established four more hotel schools, which were modelled more or less on the lines of the Larnaca school. The first of these was the Famagusta Hotel School which was established in September 1972. This school was lost to the Turks in June 1974. The next school to be established was in Paphos in September 1982 and finally the Paralimni Hotel School was established in September 1984 (21). As will be shown later, however, the "pioneer spirit" and enthusiasm of the first years of the Larnaca School were not to be repeated.

3 The Hotel and Catering Institute Programmes.

3.1 Introduction.

The Hotel and Catering Institute is administered by the Ministry of Labour. Its programmes therefore are, strictly, outside the scope of this work as the present dissertation aims at dealing with the cooperative programmes offered within the framework of secondary technical education of the Ministry of Education. Despite this, the writer has decided to include the present section for two reasons. Firstly, as was stated above, the impact of the Institute on hotel training courses in general, and the industrial training programmes in particular, have been such that a brief section on its work has been considered to be essential. Secondly the Institute, among its other programmes

offers a basic training course for the ages 15-18. As all other full-time state education and training programmes for this age group are under the jurisdiction of the Ministry of Education, the H.C.I. basic course is an exception to the rule. In fact some regard the basic programmes for the H.C.I. as being unfair, running as they do in competition with the courses run by the Ministry of Education Hotel Schools. This situation has led to some friction between the two Ministries.

The efforts of the Ministry of Labour to establish its own hotel school goes back to 1965. Unlike most of the other unsuccessful attempts of this Ministry to set up its own training centres(22), its effort to create a hotel school were crowned with success. The first Ministry of Labour hotel training institution was the Central Hotel Training School, which was established in 1965 and started functioning in 1966. The second Institution was The Hotel and Catering Institute which was established in February 1969 as a joint project of the United Nations Development Programme (Special Fund) and the Government of Cyprus. The two Institutions functioned side by side, offering basic and middle level training respectively, until April 1971 when they merged.(23)

3.2 The Financing of the Hotel and Catering Institute Project.

Of the two institutions mentioned above, by far the most significant and prestigious was the Hotel and Catering Institute. In fact, what happened was that when the H.C.I. became fully operational, it absorbed the Central Hotel School.

The H.C.I. was lavishly equipped. Under the "plan of operation" for the establishment of the Institute the United Nations contributed U.S.\$753,700 which included 288 man-months of expert service, \$32,000 for fellowships and \$150,000 for equipment and supplies. The Cyprus Government, on the other hand, provided the land and the buildings at an estimated cost of \$1,080,000, 750 man-months of professional staff service, 578 man-months of non-professional service and \$96,580 for miscellaneous services.

The "plan of operations" further provided for the project to start in 1968, the erection of the buildings and the installation of equipment to be finished by 1969. The foreign experts would be in the island in 1970 and 1971, whilst courses would start in 1969.(24) Unfortunately, the above balance in the plan was upset as the premises were not finished until mid 1972. By that time most of the experts had left. Thus the Institute was not able to derive the full benefit of the experts, although the latter organised and taught

courses, aided by the local counterparts, in the old premises. Needless to say, however, that, had the experts worked and taught in the new Institute, whose facilities were infinitely superior to those provided in the old hotel where the Institute was housed, their effectiveness would have been much greater.

When the H.C.I. complex was completed it comprised the Institute, a Hotel and an international conference Centre. Apart from its specialist rooms and excellent equipment, the Institute has a well-stocked library, a Language Laboratory, classrooms, study and recreation rooms, sports grounds and other facilities. The Institute also has dormitories for 150 students. As for the Hotel, which was called the "Philoxenia Hotel" (25), it has 30 double rooms and 2 suites with private bathrooms and balconies, and spacious public areas (bar, cafeteria, lounge, functions room). It is noted that the hotel is officially classified as a 4 star hotel and it was of course built primarily to facilitate the training of the H.C.I. students. Finally the "International Conference Centre" comprises two halls which can seat 180 and 44 persons respectively and are equipped with modern electronic equipment including simultaneous interpretation facilities and voting systems.

3.3 Administration and Functions of the Institute.

The policy of the Institute is formulated by the Ministry of Labour. However, according to the initial terms of its establishment, the Institute has a Board of Directors which consists of representatives of Employers, Trade Unions and various Government Ministries to advise the Minister of Labour on all matters pertaining to the functioning of the Institute. The Board of Directors is chaired by the Director General of the Ministry of Labour.

The Institute offers courses at three levels, basic, middle and higher as follows:

(i) Basic level courses: They are offered for waiters, cooks and pastry cooks, and they are open to trainees who have completed the third form of secondary education. The language of instruction is Greek.

(ii) Middle level courses: They cater for four specialisations, housekeeping, waiting, cookery and front office. The courses are open to persons who pass the H.C.I. entrance examinations and who satisfy the following entrance requirements:

- (a) Secondary school leaving diploma,
- (b) Age not over 23, and
- (c) Very good knowledge of English.

The language of instruction in the middle level courses is English.

(iii) Higher level courses: They are offered from time to time in Waiting, Housekeeping, Cookery and Front Office for Section Heads in Industry. The courses are open to persons who pass the H.C.I. entrance examinations and also satisfy the following requirements:

- (a) Graduation of the Middle Level Courses for the H.C.I. or other equivalent Hotel School,
- (b) Three years experience in the hotel industry in the relevant field of specialisation,
- (c) Very good knowledge of English and knowledge of French and/or German.

3.4 The Industrial Training Programme at the Basic level.

As this work is concerned with cooperative education up to the age of eighteen, this section will be confined to the industrial training programme offered at the basic level.

All training programmes offered by H.C.I. included industrial experience for specified periods, usually of not less than four months in the year. It seems however,

that at the basic level, especially when courses were first started, the quality of industrial training offered at the hotels did not come up to expectations of the officers concerned. An indication of the disillusionment of these officers is given in a frank, and in many ways outspoken report submitted by one of these officers in February 1968. The report, after declaring that the employers were not even aware what industrial training means and what it should involve, proceeds to enumerate the problems facing the system. These, according to the report were the following:

- a) There was resentment among the hotel staff against the students whom they regarded as potential future competitors.
- b) Employers did not treat the students fairly in that they expect the students to be more productive than they could possibly be after a short period of training.
- c) Employers did not honour the terms of the agreement under which students should be trained. Students were thus made to work for longer hours.
- d) Students were often employed in work which was not relevant to their training.
- e) Often employers did not pay students regularly.
- f) Employers terminated the services of students when trade in the hotel was slack.
- g) Although in the training agreement it was explicitly stated that in any disputes involving students the employers should consult with the school, employers often took one-sided action. (26)

The researcher was able to verify the validity of the above report through numerous interviews he had with past students who attended the H.C.I. at the time. These people confirmed that their industrial training programme was badly organised and badly supervised.

3.5 Difficulties caused by the Turkish Invasion.

The institute moved to its new premises in April 1972. The Philoxenia Hotel itself was completed two years later, in the summer of 1974. This was the summer the Turkish forces invaded the island.

Naturally the transfer of the H.C.I. to the new premises enhanced the image of the institute and lifted the moral of its staff. The excellent new equipment of the Institute, which offered greater scope for better training, coupled with the prospect of the students' being able to combine their institutional training with work experience on a regular basis at the Philoxenia Hotel, promised a bright future for the Institute.

These plans, however, were to be upset by the Turkish invasion of the island in 1974, especially since the invasion came before the Hotel was properly furnished.(27) In the wake of the invasion, a new need was created. The Cyprus Government in its efforts to mobilise public opinion against the invasion, encouraged Cypriots and other friendly foreign nationals who lived

abroad to come to Cyprus for conventions. At these conventions participants would be informed of the Cyprus problem and strategies would be decided as to the best way to promote the cause of the Republic. The H.C.I. was of course an ideal place to hold such conventions. The furnishing of the hotel was thus hurriedly completed and in the summer of 1975 it opened, being operated by the instructors and trainees of the Institute. Of course it might be said that the type of work experience offered to the students was not exactly of the type or quality originally envisaged, as the hotel was working under difficult conditions. Nevertheless, under the circumstances, the industrial training of students was useful both for the country and the students themselves.

The operation of the Philoxenia, however was not achieved without considerable opposition from the hotel owners. Thus during a meeting of the Board of the H.C.I. on the 14th. May 1976, the representative of the hotel owners stated that the operation of the Philoxenia had robbed the hotel industry of the little trade they had. (28) The hotels' representative went on to say that H.C.I. should not only refrain from expanding its operations, but should even consider the possibility that it should stop taking new students. Otherwise, he pointed out, since the tourist trade was practically non-existent the H.C.I. would simply train people for export. (29) The government representatives, however, rejected the above arguments and expressed the belief

that the tourist trade would eventually increase and the country should be ready to cope with the expected influx of tourists.(30)

The hotel owners continued to object to the operation of the Philoxenia for a long time and tried to reduce its appeal. They managed for example to have all advertising on the "Philoxenia" stopped.(31) Also in order to placate the hotel owners the Board decided that the public areas of the Philoxenia should be used only for the needs of Government Ministries and semi-government Authorities.

3.6 The Industrial Experience of Students of the Philoxenia.

As from the autumn of 1977, by which time the hotel was working more smoothly, a programme was drawn which regulated how students would be involved in the operation of the hotel. According to this plan students on the "Housekeeping" course would work at the hotel in the morning and have lessons in the afternoon. The cooks, on the other hand, were not used at all at the hotel during their first year, but they worked regularly for the hotel in the summer at the end of their first year. In their second year cooks were divided into two groups which worked, on alternative weeks, on a full time basis, in the hotel, whilst for the second week they had normal lessons. Finally the waiters, throughout

their programme had, alternatively, a week of lessons and a week of practice in the hotel.(32) It should be noted that in addition to their work experience at the Philoxenia, students were sent to industry for periods of various lengths during the summer months.

3.7 The Philoxenia Hotel.

Soon after Philoxenia resumed operations, the view was put forward that the hotel was too big an investment to be used mainly for training purposes. Eventually the matter was discussed by the Council of Ministers which, on the 10th February 1977, decided to set up a special committee to enquire into the possibility of contracting out the Philoxenia to an experienced hotel operator. Meanwhile certain professional posts were filled so that the hotel would work more effectively.(33)

The committee's report recommended that the Hotel should be run on a commercial basis. The Council of Ministers accepted the Committee's recommendation. Thus by decision No.15890 dated 26.5.1977 the Council of Ministers decided that the Philoxenia would operate on a "purely commercial basis". Following the decision a separate management was set up and a skeleton staff was gradually recruited starting in October 1977. The Institute's instructors continued to be involved in the operation of the hotel until the 21st December 1979 when they were totally withdrawn. The students however

continued to work on a week-on, week-off basis.(34)

The Institute instructors, however, were not very happy with the new arrangement. Their objections were voiced on 18th April 1980, when the senior instructor, acting as the spokesman of the technical teaching staff, suggested the "week-on week-off" system should be discontinued for the following reasons:

(a) The "week-on week-off" system disrupted the education of students, especially in the theoretical subjects.

(b) During the winter months there were not enough guests in the hotel, so many students were wasting their time.

(c) As the Philoxenia operated on a commercial basis, many of its functions and operations are of a repetitive nature and this is not so conducive to learning.

(d) There was often a clash over what students were taught during lessons and what they were forced to practice in the hotel.(35)

As a result of the above the cooperation between the Institute and the Hotel was discontinued. Thus from May 1980 to Sept. 1986 the trainee involvement in the operation of the Hotel was limited to an ad-hoc basis when banquets and other social functions took place.

This policy was changed again in September 1986 when the week-on week-off system was introduced again on a limited experimental basis. The change was made as a result of the recommendations of the "Grandone Report". This report will be the subject of the next section.

3.8 The Grandone Report.

3.8.1 Introduction.

In early 1984 the Government of Cyprus requested from the I.L.O. the services of a consultant to advise on the expansion and upgrading of the training programme for hotel and tourism occupations. The I.L.O. accepted the request and financed a six week mission for a consultant in hotel and tourism training. The consultant, Mr. E. Grandone, (Italy), arrived in Cyprus on September 5th, 1984, to undertake his assignment with the following terms of reference:

- (a) To assist the I.T.A. to carry out a survey to assess the manpower needs for the hotel and catering industry over the period 1985-1989.
- (b) To assist the H.C.I. to set up a comprehensive plan of activities to adjust the training programme for hotel and catering occupations to the needs of the industry over the period 1985-1989.(36)

3.8.2 Findings.

The main findings of the Grandone Report were the following;

(a) Tourism industry in Cyprus is a leading sector of the economy and provides a significant source of export earnings.

(b) The hotel and catering industry suffered from lack of skilled personnel. The Ministry of Labour, through the I.T.A. and the H.C.I. was actively promoting the organization of training programmes for hotel and catering personnel.

(c) The I.T.A. had so far been acting on an ad hoc basis through some lengthy procedures and had not made a significant impact in providing skilled manpower to the sector. The role of Employers and Trade Unions had had a restraining effect of the development of the I.T.A.'s training activities.

(d) Courses at the Hotel and Catering Institute stagnated and became heavily theoretical after the separation of the training hotel Philoxenia from the Institute.

In discussing the problems that were brought about by the separation of the hotel and the Institute, the Report had the following to say:

The separation of the management, in addition to obviously increased costs, has had adverse effects:

(a) Students rightly feel that the practice at the Philoxenia is no longer an integral part of the

training programme but an activity taking place erratically whenever the commercial operation of the hotel requires it.

(b) The practice at the Philoxenia is seen as an event disruptive of the scheduled theory lessons.

(c) Students derive limited benefit from such practice for they are called on duty for a few hours at the time ("rush hours") when the hotel staff has no time to give on-the-job training.

(d) The hotel cannot rely on the presence of trainees to fill certain posts continuously and thus trainees are treated rather like part timers who are not really integrated in the operation of the hotel.(37)

Speaking on the industrial training-on-the-job programme Grandone remarked that this training coincides with the main tourist season in Cyprus, a fact that facilitates the short term, but not the long term, placement of trainees. He went on to comment that Trade Unions, fearful that trainees may be used as "cheap labour" during the high season, have pushed their remuneration almost to the level of fully-fledged employees_ thus making trainee placement difficult.(38)

Finally it should be noted that Grandone also referred to the Hotel Schools run by the Ministry of Education _ although it was not within his terms of reference to make a deep study of them _ and said: "According to industry sources graduated from these courses are good and may be compared with those of the H.C.I. basic level courses." (39)

3.8.3 Recommendations.

The main recommendations of the Report were the

Following:

(a) The management of the training hotel "Philoxenia" and that of the H.C.I. proper be unified.

(b) The accomodation of the training hotel "Philoxenia" be expanded with the addition of at least 16 and, if possible, 32 new bedrooms, thus totalling 52 or 68 bedrooms.

(c) A new academic year calendar be established, going from April 1st to March 31st in order to provide the hotel and catering industry with graduates ready for fully-fledged employment.

(d) Curricula and syllabuses for existing H.C.I. courses be revised in the light of new draft course outlines as worked out in the course of the mission, in order to standardize course content and entitle H.C.I. graduates to gain I.T.A. credits towards future trade certification.

(e) The training programme include 50% of total duration for practice at the training hotel Philoxenia to be implemented on a week theory / week practice basis.

In his report Grandone also remarked that it had been suggested to him, both by employers and trade unionists that, in time, the H.C.I. should move out of the age bracket 15-17 and recruit its male students only upon completion of the military service.

3.8.4 Action taken as a Result of the Report.

A Technical Committee was appointed to study the Report. The Committee made the following comments on the report:

(a) The Philoxenia Hotel should fulfil its primary role as a training institution. On this point, however, the representative of the Planning Bureau expressed the reservation that the training role of the Institute should not affect its operation on a commercial basis.

(b) The suggestion to extend the hotel needed more in-depth study and consideration.

(c) The week-on / week-off programme should be reintroduced.

(d) The suggestion for a new academic year could be introduced after due consideration.

(e) The I.I.A. and the H.C.I. should cooperate in developing new training programmes based on modules.(40)

Of the above the recommendation that was put immediately into effect was the one concerning the use of the Philoxenia for training purposes. Thus, as from September 1986 a new programme was introduced by which all waiters and the second year cooks, worked in the hotel on alternative weeks, and the hotel receptionists during the week-ends.

The other suggestion that has been implemented is the one recommending the development of new training programmes based on modules. For this purpose, committees have been set up which, at the time of

writing this work, are in the process of compiling the modules.

3.9 The I.T.A. Subsidises the Hotel Industrial Training.

For years, perhaps the biggest weakness in all industrial training programmes in the island was the inability of the organisers to implement a definite training programme which students would follow.

At times attempts were made to draw up such programmes, and promises were extracted from employers' associations that these programmes would be adhered to, but it was all in vain. At the end of the day the implementation of the training programme was almost entirely left to the good will of the employers. This meant in fact that in most cases students were used in production, and as pointed out earlier, their training was incidental and depended almost entirely on the needs of production. It is for this reason that perhaps it would have been more apt to describe these programmes as "work-experience programmes" rather than "training programmes".

It follows from the above that perhaps one of the most significant developments that has ever taken place in cooperative education was the decision of the I.T.A. to

subsidise the training of students of the Hotel Training Institute.(41) The scheme, which was first introduced in June 1985, provides for the I.T.A. to reimburse the employers with 75% of the emoluments paid to students. In return the employers undertook to provide students with an agreed programme of training. In order to ensure that the programme was followed, students are required to keep log books and they are supervised at the place of work by Institute instructors.(42)

As explained above, the scheme initially covered only the H.C.I. students. Predictably, however, when the scheme was introduced the Ministry of Education asked that the scheme should include the hotel students of the Ministry of Education, since the two sets of students followed, more or less, the same course, and they were of the same age group. Rather reluctantly the I.T.A. agreed to the request and decided to subsidise the training of the Ministry of Education Hotel students as from the summer of 1986.(43) The scheme will cost the I.T.A. an estimated sum of around C£100,000 (about £130,000 sterling).

Justifiably therefore the scheme can be described as a substantial breakthrough in cooperative education in the island. It needs however to be stated that during the deliberations that led to the granting of the subsidy to the hotel students, the I.T.A. made it abundantly clear that the subsidy should not be considered as a

precedent. The I.T.A. would not be prepared to entertain requests to subsidise the other Ministry of Education industrial training programmes. Therefore, for the time being the various problems associated with these programmes remain unresolved.

These problems and the issues behind them are perhaps best examined in the context of the conflict between OLTEK and the Department of Technical Education. This will be the subject of the next section.

4. The Clash between OLTEK and the Director over the Hotel Courses.

4.1 The OLTEK demands.

As indicated at the beginning of this chapter, the hotel trades, together with the dressmaking courses, were the only vocational courses which had a five-year, instead of a six-year, duration.(44) The Teachers' Union was not happy with this situation and demanded that hotel courses should have six years like all the others. OLTEK first raised this issue officially in a document addressed to the Director of Technical Education in March 1983. In the document OLTEK demanded that "it is important to apply uniformly a policy of six-year vocational education for all trades." (45)

In the same letter OLTEK raised a second objection to the way hotel courses were run, by declaring its strong

opposition to the early breaking up of the hotel schools so that students could be sent out for industrial practice. The tone of the letter, as the following extract would indicate, was very severe as it even accused the Ministry of Education of illegal practices.

We believe that the hotel courses should not be an exception in secondary education by having different dates from all the others in the commencement and ending of the school year (October to April). This creates serious problems in the operation of schools and is contrary to the law regulating the operation of secondary schools. We are of the opinion that your oral instructions for the examination in the above course to be carried out during April should be withdrawn.(46)

In spite of the pressure, however, the Director of Technical Education refused to yield to the Union demands. As for the accusation that a shorter school year was in fact contrary to the law, the Director chose simply to ignore it.

4.2 The Director Concedes in Principle to the OLIEK Demands.

OLIEK refused to take no for an answer and continued to place the issue of the structure of the hotel courses high on its list of priorities. As a result of the Union's persistence, the Director was forced into convening a meeting early the following year in order to reexamine the hotel training programmes. Present at the meeting were the Director of Technical Education, the Inspectors of Technical Education, the Central Committee of OLIEK, and the senior instructors of the Hotel

Training Department. At the meeting OLTEK repeated its argument that the Hotel trades should have a training programme similar to all other vocational courses. In support of its argument OLTEK pointed out that with the implementation of a six-year course the general education aspect of the programme would be upgraded and students would thus be better qualified to serve in the tourist industry. The Director of Technical Education again disagreed with OLTEK and explained that a three year course to train waiters - at the time that waiters were trained in the Hotel Training Institute in only one year - would constitute a waste of time for students and a waste of public money.(47)

OLTEK however was resolute and even threatened it would resort to taking industrial action if its demands were not met. In the face of this threat the Director backed down and agreed that a three year course would be introduced, provided that such a course would be approved by the appropriate authorities and the Council of Ministers. It was also agreed that, meanwhile, the hotel trades curricula would be redrafted so that students would follow a common programme for the fourth and the fifth year, and specialise in their sixth year. It was also decided that in such a three year course, students would not be sent out for industrial training at the end of their first year. Training would be provided, instead, at the end of the second and the third years.(48)

4.3 The Industrial Training Programme is cut short.

Two months later, in January 1984, OLTEK/sent another letter to the Director accusing him that he was stalling and that his tactics were such that did not further the cooperation between the Ministry and the Teachers' Union. There followed a list of outstanding problems between OLTEK and the Ministry. First on this list was the issue of the hotel courses. The Director was reminded that there was an agreement for the introduction of a three year course. In spite of the Director's reassurances however, OLTEK added, there had been no moves towards implementing the agreed changes to the programme.(49)

In a long reply to the Union, the Director again tried to stall. He pointed out that views on the proposed changes were far from unanimous. Even some of the hotel trade instructors were against the changes demanded by OLTEK. Irrespective of the differences in the points of view, he added, OLTEK should realise that a change in the duration of a programme is a lengthy business. The matter should be first discussed by the National Educational Council, then the Planning Bureau and the Ministry of Finance should be asked for their opinions, and then a proposal needed to be submitted to the Council of Ministers for approval. These matters take a long time, he added.(50)

Following the above letter there were two lengthy meetings, in the space of ten days, between the Director and his inspectors on the one hand, the members of the Union Committee on the other, to discuss the specific issue of the length of the hotel courses. During these meetings the Director, in a way, went back on his implied promise that the three year course would be implemented, by repeating his previous arguments against uniform three year courses for trades. Also in support of his case he presented evidence showing that similar hotel trade vocational courses in Europe were of a shorter duration. OLIEK, however, were not convinced. They felt cheated and were of course adamant on their own views. Thus, since there was no way by which consensus of opinion could be reached, the matter remained unresolved.(51)

As there was a stalemate, OLIEK took the matter to the Director General of the Ministry of Education. After the meeting, and apparently as a result of pressure by the D.G., the Director's instructions as to the date of the ending of the school year, were changed. Thus according to the new directives the hotel schools would finish lessons in the first week of June, and then start with their final examinations, in the same way as all other schools in the island. Thus OLIEK won, for the time being at least, one of its demands.

4.4 Further Debate on the Industrial Training Programme.

The effect of the late release of students was that many students could not find a job because by that time the tourist season was well under way and hotels were adequately staffed. This of course did not mean that the hotels were not inconvenienced. In fact the Hotel Owners' Association was most displeased with the new arrangements and protested strongly to the Director of Technical Education against the changes made in the programme.

Because of the above difficulties the Director decided to revert to the old system of releasing students in May. In an effort to convince the Union to accept the change, the Director asked OLTEK to a meeting in March 1985.

Present at the meeting were also, again, all the Ministry inspectors. It should be noted that in the month of October in the previous year the President of OLTEK had died. The Director, therefore, probably thought that with the deceased President out of the way, he stood a better chance of having his proposal accepted. However, the Director's hopes were soon dashed, for when he announced his intentions of bringing back the old system, the new OLTEK President stated flatly that he was unable to accept the Director's

plans. The new President went on to repeat his Union's position that students should only work in the hotels outside the school year.

In order to get OLIEK change their minds, the Director presented the following arguments:

(a) Industrial training was an integral part of the hotel courses from 1963-1983. During this period the policy of placing students early in industry had proved successful.

(b) Since hotels take on extra staff for the main tourist season in April, if students were not placed in industry early, there would be a real danger that they would not find jobs in the big hotels. If they were placed later, in June or July, students would be employed in smaller, lower class, hotels in which they would receive inferior training.

(c) Since the Hotel and Catering Institute, and all private hotel schools, place their students in industry at the beginning of April, they would be able to pick the best jobs.

(d) The tourist industry in the big hotels is of a very high calibre, and all work in these big units is carried out according to world standards. Furthermore these big hotels could certainly be described as the most advanced form of industry in the island. It would be sad, therefore, if the students of the hotel schools were deprived of the valuable experience they would gain in such establishments.

(e) The practice of placing students in industry constituted a valuable link between the industry and schools. It should not therefore be stopped. On the contrary, it should be reinforced.

(f) The experiment of the summer of 1984 to keep students in schools until the middle of June, had proved a dismal failure, as many students were unable to find a job, and many others were placed in establishments which were unable to offer proper training.

The Teachers' Union was not convinced with the above arguments and presented the following in support of its own point of view:

(a) The argument that there would be a problem if students were sent to industry after the normal end of the school year was not valid. In at least one school in which DLTEK carried out its own investigations, there were no serious problems for the students to find summer work.

(b) The premature placement of students in industry is detrimental to their academic education. Schools should offer students of all trades, without exception, a liberal education and should not simply aim at providing the industry with "machines".

(c) The premature placement of students in industry serves first of all the financial interests of the hotel owners, because it provides them with cheap labour during the peak period.

(d) Industrial training was not strictly part of the

hotel trades' curriculum.

(e) OLIEK was surprised by the special sensitivity that the Director was showing towards the industrial training in the hotel trades.

(f) OLIEK pointed out that if the hotel students' summer term finishes early, many teachers are left with free periods and this is a source of discontent among the rest of the teachers.

(g) Finally OLIEK threatened that, if needed, they would take the whole matter to the press.

The Ministry inspectors who were present at the meeting supported the Director through the following arguments:

(a) Education in general, and Technical Education in particular, have an obligation to adjust to the needs of society. The theory that a student can only learn at school is old fashioned and certainly it is not valid. There are many other ways through which learning may be achieved, and in certain cases and under certain conditions such ways are preferable to schooling. The existing industrial training programme offered in the hotels is a good example of effective learning taking place outside the school.

(b) The whole education system in Cyprus is too inflexible. Technical Education, through its industrial training programmes is gradually breaking down the traditional rigid structures and is thus offering a valuable service to the whole of the educational system.

(c) In the above framework, the cooperative programme

offers mutual benefits to both employers and students. For this reason the opening of the school towards industry should not only be maintained but further encouraged and extended.

(d) If there were weaknesses in the programme they should be corrected so that the programme is improved. Isolated cases of dysfunction in the system, should not be allowed to destroy the programme.

As the reader will realize from the above, the points of view were diametrically opposed. So again no agreement was possible.(52)

4.5 Support for the Director from the Employers.

Perhaps in order to mobilise the Employers in support of his point of view, the Director arranged a meeting with their representatives on the 18th March 1985. The meeting was attended by the Director, two representatives of the Pancyprian Hotel Owners' Association, one representative of the Pancyprian Hotel Managers' Association and the Ministry Inspectors.

At the meeting the representative of the Hotel Owners's Association, started by protesting against the accusation levelled by OLTEK that the primary concern of employers was to obtain cheap labour. He went on to say that the allegation was quite unfounded as the rates paid by the employers to students were practically the

same as those paid to regular employees.

Furthermore he added, if it is taken into consideration that students are beginners and they were thus not productive, the very idea that they constituted cheap labour was quite ridiculous. The reason, he explained, that the hotel industry employs students is that it believes that it should share in the responsibility of training young workers and that, in the long term, it is in the interest of the industry to have well trained staff.

The employers' representative further declared that the shortening of the industrial programme was unrealistic and quite unacceptable to the employers simply because it could not be applied.

There followed a long discussion between the employers and the Technical Education Department officials, and finally the following compromise solution was reached: Students would be sent to the hotels from the 5th to the 22nd of April, so that they would help with the Easter rush. They would then go back to school for lessons and for their final examinations and return again to industry at the end of May.

Another point raised by the employers, and agreed to by

the Director and the inspectors, was that the leaving diplomas should be awarded to students in October, after successful completion of their industrial training programme.

4.6 Proposal for the creation of a Consultative Committee.

It follows from the above that the Director found in the employers a valuable ally. Also through various contacts he had with the hotel employees's trade unions he realized that they, too, could be potential supporters of his policies. In order therefore actively to involve these influential pressure groups in the decision-making process, and thus counterbalance OLIEK's pressure on his Ministry, he hit on the idea of putting forward a proposal for the establishment of a consultative committee. This committee he suggested would comprise the Director himself as the chairman, two inspectors, two representatives of the employers' association and one representative from each of the three main hotel employees' trade unions, one representative from OLIEK and one representative from the parents's association. The members of the committee would be appointed by the Minister of Education.

The proposal further outlined the jurisdiction and duties of the committee, the main ones of which were the following:

(a) To express views and make suggestions and recommendations to the Minister of Education on all matters pertaining to the industrial training of students.

(b) To be satisfied that an industrial establishment has the essential facilities needed for the training of students.

(c) To investigate complaints of students, parents and employers on all matters related to the industrial training programme.

(d) To participate in the drawing up and the evaluation of curricula for the hotel trades.

Finally the proposal suggested that in order for the committee to be given the stature it needed to carry out its duties, the scheme providing for the creation of the committee should be approved by the Council of Ministers.(53)

The last suggestion however caused a delay because for reasons unknown, probably political, the proposal has not yet been tabled at the Council of Ministers for consideration and approval. It may be added that one possible reason for the delay is that OLIEK has declared itself against the creation of the Consultative Committee.

4.7 OLIEK gives its Tacit Approval.

Perhaps the possibility of the creation of a Consultative Council, in which there was a strong probability that OLIEK would be isolated, coupled with the fact that the newly announced training programme was a compromise, as it was shorter than the previous one, finally drove OLIEK into offering the scheme its tacit approval. This change of policy, as may be appreciated, was not easy for OLIEK and it was not reached without much soul searching and strong feelings of ambivalence.

Thus, when the agreement on the period of industrial training between the Department of Technical Education came to be known, OLIEK reacted very strongly by demanding an immediate meeting with the Director General of the Ministry. The meeting, which was held on the 22nd of March, - only four days after the Director of the Department had met with the employers - was attended by the Director General, the Director of Technical Education and the Council of OLIEK. At the meeting the Director of Technical Education informed OLIEK officially of the new arrangements and tried to explain that the new scheme was a compromise. He went on to make a plea to the Union to accept, otherwise he feared the whole system of the hotel training programme would be in serious jeopardy. The Director further explained that in order to safeguard the interests of students, it had been decided that a committee comprising an inspector,

the headmaster of the school and one hotel trade instructor, would take responsibility for the placement of students in suitable hotels.

OLIEK however was again not convinced and reiterated its position that students in the hotel trades should have the same days of schooling as all other students. It is bad enough, they remarked, that these students follow a two year course instead of three years like the other students. They would not, therefore, consent to the two years being further curtailed.

This time however the D.G. backed the Director fully. He expressed his belief that the industrial training programme would be for the benefit of the students as well, not just the employers. OLIEK's position was thus very difficult. In order to gain time they refused to commit themselves by reserving the right to give their answer at a later date. This answer was not given, so the Ministry of Education went ahead and implemented the new programme.

Before concluding this section it needs to be said that perhaps what most influenced OLIEK into offering its silent approval of the industrial training programme, was the decision of the I.T.A. to subsidise the programme. OLIEK of course realised that if they persisted with their objections, the whole scheme of subsidy would have been placed in jeopardy.

5. STUDENTS' VIEWS.

5.1 Introduction

In order to find out the students' views on some of the basic issues that concerned them, including those underlying the conflict between the Department of Technical Education and OLIEK, the researcher conducted a survey among students in the hotel trades who were in their second year of specialisation. The reason for choosing this particular target population was that the second year students had already gone through a period of industrial training, so they could speak on the strength of their experiences. The first year students, on the other hand, had no such experience.

The whole target population was 152 students. This number the researcher considered to be small enough for the survey to include the whole population so no sampling procedure was necessary. In fact out of the 152 students questionnaires were answered by 150.

The questionnaire was divided into three parts. The first part aimed at obtaining information relating to the students' socio-economic background. The second part sought their views on the industrial training programme.

Finally the third part aimed at setting in perspective the views of students on the industrial training programme by seeking their views on their educational programme within the school.

5.2 The Students' Socioeconomic Background.

In order to explore the students' socioeconomic background, they were asked to state their father's and their mother's occupation and their father's and their mother's education (54). The students' responses on their parents' occupations are shown in the Table below.

Table 9.1 Parents' Occupation

<u>Occupation</u>	<u>Fathers(V2)</u>	<u>Mothers(V3)</u>
1. Professional	0%	0%
2. White collar	9.0	0.7
3. Technician	0	0.7
4. Skilled Worker	36.6	2.7
5. Unskilled Worker	22.8	9.7
6. Agricul./Fish.	28.3	2.0
7. Self-Employed	3.4	0
8. Housewife	0	84.1
9. Other	0	0

(55)

The students' responses on their parents' education are shown in Table 9.2 below.

Table 9.2 Parents' Education

<u>Level of Education</u>	<u>Fathers(V4)</u>	<u>Mothers(V5)</u>
1. Never went to school	2.0%	12.4%
2. Primary few years	43.4	48.3
3. Primary graduate	34.9	26.2
4. Secondary few years	11.0	7.6
5. Secondary graduate	6.9	5.5
6. Post secondary	0.6	0
7. Degree	1.4	0

The same questions were also given to vocational and apprenticeship students, and, as is shown in chapter ten (section 2.0), the pattern of findings for the three groups is very similar. It was thus decided that the significance of the findings on the socioeconomic background of students should be discussed later in chapter ten.

5.3 Students' Perceptions of the Industrial Training Programme.

As stated earlier, the questions addressed to students sought the students' views on the issues of controversy regarding their training. These were the following.

5.3.1 The Usefulness of the Programme.

As OLTEK questioned the wisdom of including an industrial training programme in the course, students were asked how useful they found the programme. Their responses showed that the great majority of students believe that the I.T.P.H.T. helps them to learn their trade. Thus, when answering the relevant question, 84.6% of the students stated that the I.T.P.H.T. helped them either "very much" or "much". Significantly of these by far the greatest proportion, (67.3%), were those who believed the I.T.P.H.T. helped them "very much". It is also significant that only 3.3% stated that the programme helped them "little" if "very little". (Details of the responses are shown in Table 9.3)

TABLE 9.3 Programme Contribution to Trade Learning.(U6)

Question: To which degree has the Industrial Training Programme helped you to learn your trade?

Responses:

1. Very much	101	67.3%	} 84.6
2. Much	26	17.3%	
3. Moderately	14	9.3%	
4. Little	2	1.3%	} 3.3
5. Very little	3	2.0%	
Omissions	4		

Students were also requested to make further comments on the issue. These reinforced the above findings as all comments were in favour of the training programme, but they varied considerably as to the intensity of feelings

they expressed. Some typical "mild" statements were the following: (a) "A student cannot learn his trade without a period of industrial training", (b) "what we did not learn at our school, we learnt in the hotels", (c) "the school could not possibly train us as well as they do in the hotels, because they do not have the equipment". On the other side of the spectrum there were statements which, presumably in order to stress the usefulness of the programme, were quite critical of the work carried out in the schools. Some typical remarks of this type were " If it were not for the industrial programme I would not have not have known what a cook is" (56), "whatever I learnt in my trade, I learnt it in the industry", and "by far the best part of the course is the industrial training programme".

5.3.2 Duration of the I.I.P.H.I.

As has already been explained, OLTEK also demanded that the length of the industrial training programme should be reduced, so that the school-based education is not affected. When students were questioned on this issue, their responses showed that not only did they not wish their training programme to be reduced, but on the contrary most students (74.7%) stated that they would like the length of the industrial programme to be increased so that they could work for longer periods in the hotels. A much lower percentage(18.7%) of students would like the period of industrial training to stay the

same as it is to-day and only 3.3% want the period to be shortened so that they work only during the summer school holidays. Finally only one out of the 150 students who answered the questionnaire stated that there should be no industrial training at all. (Table 9.4)

Table 9.4 Duration of the I.T.P.H.T.(V7)

Statement: I believe that the duration of the industrial programme should:

Responses:

1. Be increased.	112	74.7%
2. Stay the same.	28	18.7%
3. Be shortened.	5	3.7%
4. Be abolished.	1	0.7%
Omissions	4	

Typical comments by the students on the subject were the following: " If we have a longer training period in the hotel, we shall learn our trade better", "industrial training helps the students learn industry", and "we should start the industrial training in April and finish in October". There were students, however, who admitted that the main reason they would like to see their period of training extended was that in this way they would make more money.

5.3.3 Students' Earnings

As OLIEK repeatedly stated that the I.T.P.H.T. provided cheap labour for the hotels, students were asked whether they were satisfied with earnings. The answers showed beyond doubt that the students themselves do not regard

themselves as cheap labour. Thus 76% of the students stated that they are either "very pleased" or "pleased" and only 10% were "displeased" or "very displeased" with the remuneration they received during their industrial practice. (Table 9.5)

Table 9.5 Students' Earnings.(U8)

Question: How pleased are you with your earnings during the period of your industrial practice?

Responses:

1. Very pleased.	40	26.7%	} 76.0%
2. Pleased.	74	49.3%	
3. Fairly pleased	18	12.0%	
4. Displeased.	9	6.0%	} 10.0%
5. Very displeased.	6	4.0%	
Omissions.	3		

On further questioning it was found out that the average earnings of students was around C£50 a week. In addition most of the students had worked over-time for which they were paid according to the approved rates. It was also established that in all 15 cases in which students expressed displeasure, the students were employed in small concerns and were in fact paid less, or much less, than the normal rates.

5.3.4 The Atmosphere at the Place of Work.

In order to obtain some indications as to whether students were happy in industry, they were questioned on how congenial they found their place of work. The majority of students (77.4%) answered that they found

the atmosphere of work either "very friendly" or "friendly", whereas 7.3% found it "not so friendly" or "not at all friendly". (Table 9.6)

Table 9.6 The Atmosphere at work.(U9)

Question: How friendly do you find the atmosphere in your place of work?

Responses:

1. Very friendly.	46	30.7%	} 77.4%
2. Friendly.	70	46.7%	
3. Moderately friendly.	23	15.3%	} 7.3%
4. Not so friendly.	6	4.0%	
5. Not at all friendly.	5	3.3%	
Omissions.	0		

During interviews with students the researcher was able to verify that students in general were well treated. Time and time again students stressed that the greatest single factor that helps them in their relations with other people in industry is the frequent visits by their instructors to their place of work. This point was also made in the students' answers to another question to be dealt with later.

5.3.5 Respect of students for those they worked with.

In order to explore further the attitude of students towards the conditions under which they were required to work, they were questioned on whether they felt respect for the people they had to work with during their industrial programme. Judging by their responses students respected these people. Thus 69.3% felt either

"great" or "very great" respect compared to 6% who felt "little" or "very little" respect . (Table 9.7)

Table 9.7 Student Respect for Others.(U10)

Statement: The respect I felt for those I worked with was:

Responses:

1. Very great.	56	37.3%	] 69.3%
2. Great.	48	32.0%	
3. Fair.	35	23.3%	
4. Little.	5	3.3%	] 6.0%
5. Very little.	4	2.7%	
Omissions.	2		

On further questioning it was established that the main reasons students felt respect towards their colleagues in industry _ and among these they included the supervisors _ were the following: (a) People were kind to them and they helped them to acquire the skills they needed for their work, (b) Students respected the knowledge, skills and professionalism of people who worked in the hotels.

5.3.6 Fatigue of Students after a Day's Work.

In a further attempt to explore the impressions of students from their training programme, they were questioned on whether they felt tired after a day's work. In this case the responses were more evenly spread. Thus 43.3% of the students answered that they were "very tired" or "tired", whilst 33.3% said they were "little tired" or "not tired at all". (Table 9.8)

Table 9.8 Student Fatigue.(U11)

Question: How physically tired were you after a day's work?

Responses:

1. Very tired.	23	15.3%	] 43.3%
2. Tired.	42	28.0%	
3. Moderately tired.	33	22.0%	
4. Little tired.	30	20.0%	] 33.3%
5. Not tired at all.	20	13.3%	
Omissions	2		

In further comments on the subject, students stated that they felt tired if they worked over-time. However it seems that the pressure of work in the hotels during the summer was such, that the students had no alternative but to work beyond their normal working hours. Working in shifts also tired them out. However, though they got tired, students did not seem to mind it so much, and they more or less accepted the situation as a necessary evil, especially since they were paid extra for their over-time. It needs to be stated here, that schools frown upon their students working over-time.

5.3.7 Ways to Improve the I.I.P.H.I.

Finally students were asked to state ways by which the industrial training programme could be improved. This was an open question and the responses varied considerably. Nevertheless they were consonant with the answers given by students in the previous structured questions. For example 40 students (27%) stated that the best way to improve the programme was to make it longer. 15 students (10%) said that the quality of training offered within the hotels should be improved. Another 30 students (20%) were more specific, pointing out that the quality of training could be improved through closer contact between school and the hotels and more supervision of the training by instructors. Some students in this group accused their instructors of

indifference. Again linked with the above, ten students (7%) suggested that a greater effort should be made by the school to explain, to the employers and the supervisors, the aims and objectives of the training programme, as these people did not seem to realize that students were sent to hotels to learn a trade. Another related point made by 12 other students (8%) was that students should have more rights at the place of work. Very often, these students remarked, they felt there was nobody to look after their interests. Other suggestions made by students to improve practice were that they should be sent only to big recognised hotels (8 students), that they should be allowed to live in the hotels (12 students) and that students themselves should make a greater effort (13 students). Finally 10 students declared that they found their industrial practice entirely satisfactory.(U12)

5.4.0 Student Perception of Educational Programme within the School.

The questions put to students in this section aimed either at exploring controversial issues, like whether the hotel course should have six years instead of five, or at examining how students perceived the quality of education offered at school. To this effect students were asked five questions, the responses to which were as follows.

5.4.1 Duration of the School course.

Since one of the most debated issues was the length of the course, students were asked directly to give their views on the matter. The majority (58.7%) replied that they preferred to keep the course as it is now, whilst the rest (41.3%) stated that they would rather have the course extended to six years. The question and the responses were as follows.

Table 9.9 Duration of the Course.(V13)

Statement: I believe that the length of the course for the hotel trades should:

Responses:

1. Stay as it is now, i.e. it should be two years and finish at the end of the fifth form.	88	58.7%
2. Be extended by one year and finish at the end of the sixth form.	62	41.3%
Omissions	0	

Predictably, when questioned further, students who preferred the course to remain as it is now, explained that the two years were adequate for them to learn their trade. Those who preferred the course to be extended, on the other hand, gave two reasons why they thought there should be change. The first reason was that they felt that, with the extra year, graduates of the hotel courses would have a more realistic chance to proceed with further studies if they wished to do so. Another

group of students, however, gave a completely different reason. They said that a third year was necessary so that they are better trained and better educated.

5.4.2 Allocation of Periods General Education v Specialisation.

Students were questioned on whether they would like to have a change in the existing allocation of periods, and if so, whether they would like to have an increase in the general education subjects or in the specialisation subjects. The responses showed that very few students (2.7%) wanted to have an increase in the periods of general education. On the other hand, quite a number of students (24.7%) wanted the programme to stay as it is now. Finally by far the greatest number of students (70.7%) wanted to have more periods in the specialisation subjects.(Table 9.10)

Table 9.10 Period Allocation.(U14)

Statement: As regards the allocation of periods in the school programme, I would prefer:

Responses:

- | | | |
|-------------------------------------------------------------------------------------------------------|-----|-------|
| 1. That we should have more periods of general subjects and fewer periods of specialisation subjects. | 4 | 2.7% |
| 2. That the programme should stay as it is now. | 37 | 24.7% |
| 3. That we should have more periods of specialisation subjects and fewer periods of general subjects. | 106 | 70.7% |
| Omissions. | 3 | |
-

On further questioning most students who had stated they would like to have more periods in specialisation subjects were more specific, by saying they would prefer to have an increase in the periods of workshop practice, rather than workshop theory or other related subjects. During interviews students almost invariably linked the need for an increase of workshop practice periods with the need for students to perform better during their industrial training programme. "Unless we have mastery of certain skills" many students remarked, "when we go to the hotels we are not asked to do responsible work".(57)

5.4.3 Quality of Learning in the Technical Subjects.

Students were asked to express their views on the quality of technical subjects in their school. The response varied considerably. 48% of the students answered that they considered the quality of technical subjects either "good" or "very good", 24.7% thought it was "fair" and 23.4% said it was "not satisfactory" or "not at all satisfactory". (Table 9.11)

Table 9.11 Quality of Technical Subjects.(U15)

Question: How would you describe the quality of education offered by your school in the subjects of your specialisation?

Responses:

1. Very good	28	18.7%	] 48.0%
2. Good	44	29.3%	
3. Fair	37	24.7%	] 23.4%
4. Not satisfactory	7	4.7%	
5. Not at all satisfactory	28	18.7%	
Omissions	6		

Of the students who were not satisfied with their specialisation subjects, the greatest number were critical of the teaching in the subject of "Workshop Practice". There were also complaints about the inadequacy of the equipment in their workshops. There were others who expressed their disappointment with teachers who, according to them, were quite indifferent. On further examination it was established that most complaints came from the Paralimni Hotel School. The criticism was perhaps justified because this school had been established only two years before the survey was carried out and obviously it was going through teething problems. Also some of the staff were quite inexperienced, whilst one other was very near retirement.

5.4.4 Quality of Education in General Subjects.

Students rated much higher the quality of education offered in the general subjects than that in technical subjects. Thus 68.7% of students rated the general education offered as "very good" or "good", 18% as "fair" and only 11.3% as "not satisfactory" or "not at all satisfactory". (Table 9.12)

Table 9.12 Quality of General Subjects.(V16)

Question: How would you describe the quality of education offered by your school in the general subjects?

Responses:

1. Very good	40	26.7%	] 68.7%
2. Good	63	42.0%	
3. Fair	27	18.0%	
4. Not satisfactory	8	5.3%	] 11.3%
5. Not at all satisfactory	9	6.0%	
Omissions	3		

The above responses may seem to be incongruous in the light of those given in Table 7.8 in which the majority of students (70.7%) expressed their preference for the number of periods allocated to the specialisation subjects to be increased. The probable explanation for the apparent incongruency is that, although some students are critical of the quality of teaching in the technical subjects, they feel that these subjects are important for their career.

5.4.5 Ways to Improve Education Offered at the School.

When students were asked how education offered at the school could be improved, many of them (46 students) replied that the curriculum should be changed so that they are taught more periods of workshop practice. Another group of students (82) gave a similar reply to the previous one, though these suggested that more time should be given to the specialisation subjects. It is significant, therefore, and needs to be noted, that out of the 150 students who answered this open question, 128 of them (85.3%) felt that in order to improve the educational programme, the first priority should be to increase the time allocated to specialized subjects.

The third most numerous group (17 students - 11.3%) suggested that it was necessary to have better teachers. Other suggestions were to improve the quality of equipment in the schools (13 students -8.7%), increase the number of periods that students spend in the school (4 students - 2.7%), extend the course by one year (2 students - 1.3%). Finally three students (2.0%) replied that they could not offer suggestions because they found their schooling satisfactory in every way.(V17)

The above analysis shows that although this question was an open one the answers given are similar to the findings of the previous question, and therefore reinforce them.

5.4.6. Satisfaction with the Choice of Trade.

The first question put to students was whether they were pleased with their choice of trade. The answers to the question showed beyond any doubt that students were indeed satisfied with their choice. Thus 79.0% of the students were either "very pleased" or "pleased" with their trades, and only 3.3% were either "little pleased" or "not at all pleased". (Table 9.13)

Table 9.13 Satisfaction with Choice of Trade. (V18)

Question: How pleased are you with your choice of trade?

Responses:

1. Very pleased	82	54.7%	] 79.0%
2. Pleased	38	24.3%	
3. Moderately pleased	19	12.7%	
4. Little pleased	3	2.0%	] 3.3%
5. Not at all pleased	2	1.3%	
Omissions	6		

When asked why they were satisfied students almost without exception replied that it was because they either liked working in the hotels or that they had good prospects for employment and also their job was paid well.

6.0 SUMMARY AND CONCLUSIONS.

The main hypothesis examined in this chapter was that although the industrial training programme in the hotel

trades suffered from many of the dysfunctions that were common to all cooperative programmes, the hotel programme was more successful than the rest because it was particularly favoured by certain conditions and factors peculiar to the programme

In examining the above hypothesis it was initially established that the first hotel school in Larnaca gained strong community support in the early stages of its operation. The support was given firstly as a direct result of the dedication and enthusiasm of the headmaster and the instructors of the school, who, in spite of difficulties and poor resources, managed to gain the respect of the industry and the community. The second reason, and perhaps more important, was that the community of Larnaca supported the school out of a deep sense of localism. In this respect the particular socioeconomic conditions prevalent in the town at the time favoured the school and hence its training programme.

In the course of the chapter it was also established that another factor that eventually helped the programme was the establishment of the Hotel and Catering Institute. For it was thanks to the Institute that the implementation of a planned and supervised training programme was made possible. There can be no doubt that if it was not for the special relationship that the Ministry of Labour enjoyed with both the I.T.A. and the

H.C.I. (58), the subsidy to the programme would never have materialised. The subsidy was of course intended for the students of the H.C.I. However when granted, the Ministry of Education was not slow in claiming and winning the same benefit for its own students. The decision to subsidise the programme will of course have a great impact on the programme and will change its very nature, as for the first time students will not be sent out to industry merely for work experience, but for a planned training programme. The hotel training programme is, for the time being at least, the only one that enjoys this benefit. Therefore it could be said that even for this reason alone, the H.T. programme could be characterised as the most successful. Of course the programme could be described as successful on the strength of the findings of the survey among its students as well.

The establishment of the H.C.I. is, for the purpose of this thesis, important in another respect as well. It illustrates, once again, the continuous antagonism between the Ministries of Labour and Education that permeated the whole field of activities wherever there was a possibility for their jurisdiction to overlap. Of course in the case of the hotel trades the Ministry of Labour won. The victory was significant because, as a result, the Ministry of Labour managed to obtain a foothold on the education and training of the age group 15-17 which is generally regarded as the domain of the

Ministry of Education.

The dysfunctions referred to in the main hypothesis of this chapter stemmed mainly from the differences of opinion, as to what should be the nature of the programme, between OLIEK and the Department of Technical Education. The issues raised support for the hypothesis that teachers basically disagreed with the policy of incorporating industrial training programmes in the technical school curriculum. The teacher union rejected in particular such programmes being held during the normal school year. Related to this objection was OLIEK's demand that an extra year should be added to all hotel courses. It is evident, therefore, that OLIEK maintained that the longer students spent in schools the better was the educational offering. The Department of Technical Education, on the other hand, disagreed with OLIEK and tried in every way to promote the policy of having industrial training as part of the curriculum. The Department was also against the extension of studies by one year. As indicated earlier this stand was different from the one that the Department took for the other vocational courses. Unavoidably the disagreement between the two sides was a source of dysfunction.

On the issues raised the researcher sought the views of

the students. The survey showed beyond doubt that the majority of students were in favour on the industrial training programme and against an extension of studies. When the researcher showed these findings to OLTEK, the committee dismissed them as being insignificant because, as they said, students were too immature to know what was good for them. Students, they argued, are simply pleased with the money they receive but these feeling of satisfaction are ephemeral. Student, a member of the committee concluded, will one day regret that they were cheated out of a proper education. Of course, in order to find out how valid OLTEK's arguments were, a tracer study among graduates needed to be carried out. Such a study was outside the scope of this work. However, the researcher, by asking around, found out that there were a great number of hotel school graduates who held good responsible jobs in the industry. When some of these were asked to make comments on the issue under discussion, they were generally in agreement with the students in that the curriculum should include industrial training. They also said they did not miss a third year of specialisation. However these findings cannot be regarded as conclusive. Thus, in spite of the above evidence, the union's question on why should hotel students be offered fewer years of education than anybody else, remains unanswered. Perhaps the only possible answer that can be given is that shorter training is preferable on purely utilitarian grounds.

It is also interesting and pleasing to note that, as the survey showed, students were not only satisfied with the remuneration, but they also felt that the industrial training programme helped them learn their trade. They were also pleased with the conditions at work as they found the atmosphere friendly. A further sign of the students' favourable attitude towards their work was that their replies showed that the great majority of them respected those they worked with.

As for their institutional education, the replies of students showed considerable maturity. As pointed out before, although students on the one hand asked for more periods to be given to specialisation subjects, on the other hand they rated higher the quality of teaching in the general subjects. This finding raises many questions not only as to the way specialisation subjects are taught, but also perhaps on the content of general subjects. For these subjects, although, in the eyes of the students taught efficiently, may offer material which is considered by them either irrelevant or useless.(59)

Finally perhaps the most noteworthy sign of what would be generally considered as a healthy attitude to their work is that the great majority of students replied that they were pleased with their choice of trade.

References and Notes.

1. For details of the two programmes see Chapter Eight.
2. Minutes of the meeting: Larnaca Technical School file on hotel trades.
3. At a later date the English specialist Mr. Fuller was consulted on the contents of the course and the final syllabus was modified accordingly.
4. Press Release (June 1963) _ Greek Communal Chamber.
5. The researcher based his account of events of the first year of the school on a great number of interviews with, among others, the then Headmaster of the school, instructors, hotel owners and members of the public.
6. Here there seems to be a contradiction between the initial announcement which stated that the course would be a two year one, with a two year general secondary education as a prerequisite. The explanation for the apparent discrepancy is that with the implementation of the course it was decided that it would be preferable for the school to offer the preparatory two year general education itself.
7. "Report on the Hotel School in Larnaca", February 1965. Larnaca Technical School files.
8. In this way, of course, students lost their holidays. However, although this practice has continued ever since, there seems to be no evidence of serious discontent among the students as a result of this arrangement.
9. School Notice: Dated 6.1.64 (From the files of the school.)
10. Larnaca Vocational School files.
11. Again there was no allowance for holidays for the students. In fact the second year students were the same students who had already worked during the previous summer and they were expected to work during the following summer as well. This meant that for two years these boys had no holidays at all.
12. It is interesting to note that the headmaster in his letter omitted to say that a longer period of work-experience might be for the benefit of the students as well.
13. Normally there were no lessons in the afternoon.
14. Letter dated 7th April 1969 _ Larnaca Vocational School files.

15. Information taken from the school files.
16. For this reason the school, in his honour, was officially named as "Diannellos Vocational School"
17. Taken from the school diary.
18. The school restaurant was open to the public for one evening and one lunch per week.
19. Details about the establishment of this school are given in a later section of this chapter.
20. Larnaca Vocational School file on Hotel Trades.
21. Source: Annual Reports of the Director of Technical Education.
22. See Chapter 5.
23. "The Hotel and Catering Institute - General Information" leaflet, 27.3.1980.
24. Hotel and Catering Institute Nicosia-Plan of Operation, U.N.D.P. (Special Fund) I.L.O. August 1968.
25. "Philoxenia" in Greek means "hospitality".
26. C. Kotsonis: "Report on the Industrial Training Programme of Students in the Hotel Industry", Hotel and Catering Institute 20th September, 1968.
27. Before the invasion, on 10.5.1973 the Council of Ministers approved a sum of £72,441 to be spent on furnishing the H.C.I. and an additional £76,000 for incidentals. Of this sum £46,538 was spent before the invasion and the sum of £29,525 was left outstanding. With the elapse of time there was an increase on the prices so that the amount needed to complete the work amounted to £45,000 (Document H.C.I. 6.1.4)
28. It needs to be noted that following the Turkish invasion of the island the tourist trade fell drastically.
29. Minutes of the meeting of 14th May 1976.
30. As it happened the government representatives were right in their predictions because by 1980 the number of tourists to the island started to increase rapidly and it has continued to do so ever since.
31. Minutes of the Board meeting of 7.7.76.
32. From Appendix I to the minutes of the meeting of the H.C.I. Board of the 28th March 1978.

33.Source: Minutes of the H.C.I. Board meetings.

34.Source: Minutes of the H.C.I. Board meetings.

35.Minutes of the H.C.I.Board meeting of 18th April 1980.

36.E.Grandone:Training for Hotel and Catering Occupations Terminal Report I.L.O. Geneva 1984.

37.Ibid P.24

38.Ibid p.25

39.Ibid p.26

40.H.C.I.document of 12/11/85

41.The I.T.A. had previously subsidised the industrial training of students of the Higher Technical Institute. That case however differed in that the H.T.I. students followed courses of Higher Education.

42.I.T.A. 1985 Annual Report.

43.Minutes of the meeting of 5th July 1986.

44.The reader is reminded that the first three years of secondary schooling were strictly general education. Therefore the vocational courses themselves were two and three years respectively.

45. OLTEK archives.

46. As above.

47.The attitude of the Director on the issue of the extension of the duration of the hotel course seems to have been different from his attitude towards the extension of the other vocational courses. Whilst in the case of the latter, the Director, as explained in the previous chapter, was secretly in agreement with the Teachers' Union, in the case of the hotel trades the Director seemed to be convinced that there was no need for the courses to be extended.

48.Minutes of the meeting of 15th November 1983. Ministry of Education File.

49.Letter dated 26.1.84 OLTEK files.

50.Letter dated 1.2.84 Ministry of Education File 537/70/3

51.Minutes of the meeting of 10/2/84 and 21/2/84

52.This section is based on two sources: (a) The minutes of the meeting of the 1st of March 1986. (Ministry of

Education file 537/70/3) and (b) Interviews with the participants of the above meeting.

53. Ministry of Education _ 18th March 1985.

54. As it is explained later on in Chapter 10, the parents' education and occupation were deemed to be adequate and reliable indicators of the students' socioeconomic background.

55. The notations V2 and V3 at the top of the table stand for Variable 2 and Variable 3 respectively. The complete questionnaire, as well as all other questionnaires used in the survey, together with responses are included in the appendix.

56. The statement came from a student who was in his second year as a cook.

57. The existing allocation of periods for hotel trades is as follows:

A. General Subjects (Total 22)

Religious Instruction 1, Greek 4, Mathematics 2,
English 6, History 1, French 3, German 3,
Physical Education 2.

B. Specialisation Subjects (Total 19)

Tourist Information 1, Materials 1, Costing 1,
Oenology 1, Dietetics 1, Hygiene 1, Trade Theory
3, Workshops 10.

58. The most obvious and striking common bond is that both the I.T.A. and the H.C.I. are under the jurisdiction of the Ministry of Labour. Also and equally important is that the D.G. of the Ministry is chairman to the Board of both the above institutions.

59. There will be further discussion on curriculum in a later chapter.

6 CHAPTER TEN

STUDENT PERCEPTIONS OF THE INDUSTRIAL TRAINING PROGRAMME.

1. Introduction.

A central research question in the study was how students themselves view the Industrial Training Programme. Coupled with this aim, and in order to set the findings in perspective, the students' socioeconomic background and other student characteristics were also investigated.

The main instrument for the study was a questionnaire administered to students. Other sources of information were conversations with students, observation, school records and Ministry of Education records. The questionnaires were filled out in schools during the last term of the school year 1984-1985.

The target population consisted of two groups of students; (a) those in the third (final) year of apprenticeship, and (b) those in the sixth (final) year of the vocational streams of technical schools (1). The reason for choosing this particular target population was that apprentices in their final year, being more mature and having more experience of the programme, were considered to be in a better position to provide

reliable information. Also, in the second case, the final year vocational students were the obvious choice as they are the only vocational students who participate in the programme.

The number of apprentices in the final year was small enough to allow for the questionnaire to be administered to all of them. Thus, all 221 final year apprentices were requested to fill out a questionnaire and out of these 218 responded. In the case of the sixth-grade vocational, there were 572 students. Since this number was considered rather excessive, it was decided that questionnaires would be administered to half of them, and more specifically, to every other student in each class. Eventually, out of the 286 sixth vocational students who were requested to participate in the survey, 283 answered the questionnaire. Of the 500 students who answered the questionnaire, 487 were male and only 13 female (V1)-(2). These figures illustrate the fact that in spite of government efforts, there are very few girls attending technical schools in the island.

The structure of this chapter will be as follows. The first two sections will examine the socioeconomic background of students, and some relevant student characteristics. There will then follow an examination of the student perceptions of their industrial training programme. More specifically the following hypotheses

will be tested.

(a) The I.T.P. students are satisfied with the programme.

(b) The I.T.P. students are satisfied with their choice of trade.

(c) Apprentices compared with vocational students are more satisfied both with the programme itself, as well as with their choice of trade.

The hypotheses will mainly be tested through the use of frequencies. Relationships will be tested through chi square statistical analyses. When the relationship is found to be significant (at the level of $p < 0.05$), the degree of significance will be determined through Kendall's Tau C. If Tau C is less than 0.05, the relationship will be considered to be significant. The smaller the value of Tau C, the stronger the relationship between the variables will be considered to be.

2.0 The Socioeconomic Background of Students.

This section aims at examining the following two hypotheses:

The first is that the I.T.P. students come from a lower socioeconomic background than the national average. The second is that of the I.T.P. students, the apprentices come from a lower socioeconomic background than the vocational students.

In order to test the above hypotheses, the researcher chose to include in the questionnaire items asking about parental education and occupation. As the above items reflect the family income as well, they were considered to be ,for the purpose of the study, adequate and reliable indicators of social background(3). The responses obtained were subsequently compared with the findings of a national survey with similar questions addressed to the total student population, carried out by the Pedagogical Institute of Cyprus in 1982.(4) As the two surveys were conducted within three years of each other, the comparison was deemed to be valid.

2.1 Social Class by Father's Occupation.

The breakdown of the occupation of the I.T.P. students' fathers and the occupation of the fathers of the total student population is shown in Table 10.1 below.(5)

Table 10.1 Social Class by Father's Occupation (U3)

<u>Occupation</u>	<u>I.T.P.</u>	<u>National</u>
1. Professional	0.0%	6.3%
2. White Collar	9.0	19.8
3. Technician	0.8	11.9
4. Skilled Worker	50.7	31.3
5. Unskilled Worker	19.0	9.2
6. Agricultural/ Fisheries	14.7	10.4
7. Self-employed	5.7	7.3
9. Other	0	3.8

Inspection of the Table shows that there is a far lower

proportion of I.T.P. fathers in the top three occupational categories than of the total population fathers(6). In this respect it is remarkable that out of the 489 I.T.P. students who completed the questionnaire, there was not even one whose father was in the "professional" category. In the lower part of the scale, which included skilled workers, unskilled workers and farmers, there was of course a greater proportion of I.T.P. fathers. Finally in category 7, that of the self-employed, there were again slightly fewer I.T.P. fathers.

If, as stated before, it is assumed that the father's occupation is an indicator of social class, the above findings lend support to the first hypothesis that I.T.P. students come from a lower socio-economic background than the national average.

In order to test the second hypothesis the type of programme (V2) was correlated with the father's occupation (V3). The chi-square statistical analysis showed there was no significant relationship between the two variables. The second hypothesis, therefore, that the apprentices come from a lower socioeconomic background than vocational students, as far as it could be indicated through fathers' occupation, cannot be supported.

2.2 Social Class by Mother's Occupation.

A similar question to the previous one was used to test the students' socioeconomic background as judged through the mother's occupation. The details of the mothers' occupations are shown in Table 10.2

Table 10.2 Mothers' Occupations (U4)

<u>Occupation</u>	<u>I.I.P.</u>		<u>National</u>	
1. Professional	0.2%	} 1.2%	0.4%	} 11.4%
2. White Collar	0.8		6.2	
3. Technician	0.2		4.8	
4. Skilled Worker	3.8	} 14.3%	1.4	} 10.0
5. Unskilled Worker	10.3		7.3	
6. Agricultural/ Fisheries	0.2		1.3	
7. Self-Employed	0.0		4.7	
8. Housewife	84.5		73.6	
9. Other	0.0		0.3	

The responses in Table 10.2 follow a similar pattern, if not as pronounced, as those in Table 10.1. Again in the first three categories there are significantly fewer I.I.P. student mothers than total student population mothers (1.2% compared with 11.4%); whilst in categories 4 and 5 there is a greater proportion of them. Also significant are the findings that there are 84.5% of I.I.P. mothers who are housewives, and hence do not contribute to the family income, compared to 73.6% of the total population. Finally it is significant that there were no self-employed I.I.P. mothers compared to 4.7% in the national group.

The above findings help sustain the first hypothesis. As for the second hypothesis, however, again the chi square statistical analysis showed no significant difference in the mothers' occupations between apprentices and vocational students. From this point of view, therefore, the second hypothesis could not be sustained.

2.3 Social Class by Father's Education.

Again in this case the scale used was the one devised for the Institute survey. Table 10.3 shows the responses from the two groups.

Table 10.3 Father's Education (U5)

<u>Level of Education</u>	<u>I.T.P.</u>		<u>National</u>	
1.Never went to school	3.0%	} 82.0%	1.3%	} 52.2%
2.Primary few years	41.1		25.6	
3.Primary graduate	37.9		25.3	
4.Secondary few years	9.8	} 18.0%	12.9	} 47.8%
5.Secondary graduate	6.4		19.0	
6.Post secondary	0.9		7.8	
7.Degree	0.9		8.1	

The pattern of responses clearly indicates that the fathers of I.T.P. students are less educated. Thus in the first three levels of education (up to primary graduate) there are 82.0% fathers of students in the I.T.P. compared with only 52.2% of the fathers of the total student population. At the higher levels there are of course correspondingly far fewer fathers of I.T.P. students. It is perhaps worth noting that this pattern is constant at every level of education.

Thus, again assuming that father's education is an indicator of social class, the above findings support the first hypothesis. On the other hand, when the type of programme (U2) was correlated with father's education (U5), the chi square analysis indicated that the relationship was not significant. Therefore from the aspect of father's education the second hypothesis cannot be supported.

2.4 Social Class by Mother's Education.

In order to explore further the students' family educational background students were questioned on their mother's education and, in the same way as for the father's, the findings were compared with similar ones for the total population.(Table 10.4)

Table 10.4 Mother's Education (U6)

<u>Level of Education</u>	<u>I.I.P.</u>	<u>National</u>
1.Never went to school	7.1%	2.6%
2.Primary few years	49.5	35.0
3.Primary graduate	32.5	27.1
4.Secondary few years	6.9	10.3
5.Secondary graduate	3.8	17.4
6.Post secondary	0.2	4.6
7.Degree	0.0	3.0
	89.1%	64.7%
	10.9%	35.3%

By comparing the proportion of mothers at the various levels of education in the two groups, it may be deduced that the pattern of responses is similar to that for the fathers, in that the I.I.P. mothers received less

education than the national average. It is again worth noting that the pattern is consistent for all levels of education, that is there are consistently more I.T.P. mothers in the lower levels of education and fewer in the higher levels of education.(7)

The findings again support the first hypothesis. The correlation however of the type of programme (U2) with mother's education (U6) again showed the relationship was not significant and thus could not support the second hypothesis.

2.5 Conclusion

The analyses of the findings on the socioeconomic background of students, as far as this can be judged through parents' occupation and education, consistently support the first hypothesis, that I.T.P. students come from a lower socioeconomic background than the national average.

Again consistently, the chi square statistical analyses indicated that there is no significant relationship between the type of programme and the parents' occupation and education. Thus the second hypothesis, that apprentices come from a lower socioeconomic background than vocational students cannot be sustained.

3. Some Further Student Characteristics.

3.1 Before proceeding with the students' perceptions of their industrial training programme, it has been considered helpful to provide some further information about the students, which has been obtained mainly through the questionnaire. The section is intended to enable the reader gain a deeper insight into the target population. The purpose, of course, is that, as a result of a better understanding of students, the findings on their perception of the I.T.P. will be more meaningful.

3.2 It is generally accepted that the I.T.P. students are academically the weakest in the total student population, and that students end up in the apprenticeship scheme, or the vocational streams of the Technical Schools, if they are not good enough for other forms of education.(8) It was interesting therefore to find out how they themselves perceived their performance at school. Their responses showed that they considered themselves slightly above average. Thus 29.8% thought themselves "excellent" or "good", 44.8% as average and 25.4% as "weak" or "very weak".(Table 10.5)

Table 10.5 Perception of Achievement at school (U43)

Statement: As far as my achievement at school goes, I regard myself

	No.	%	
1.Excellent	27	5.4	] 29.8
2.Good	122	24.4	
3.Average	224	44.8	
4.Unsatisfactory	120	24.0	] 25.4
5.Weak	7	1.4	
Omissions	1		

Considering that in Cyprus students are highly motivated and they generally feel a strong need to do well at school, to the degree that it is not easy for a student to admit he is weak, the above answers should be considered to be quite honest.

When V43 was correlated with programme type (V2) it was found that apprentices, compared to vocational students, were more likely to consider themselves as being weak at school (Chi square 14.022, $p=0.072$, Kendall's Tau C -0.133 and $p=0.0028$) As of the two groups of students, the apprentices are in fact the weaker, the finding further reinforces the remark made above that the students' responses were honest.

3.3 Students were also asked as to how they perceive their achievement at work. Their responses are shown in the table below.

Table 10.6 Perception of Achievement at Work (V44)

Statement: As far as my achievement at work goes, I regard myself

	NO.	%	
1. Excellent	75	15.2	] 68.5
2. Good	263	53.3	
3. Average	133	27.0	
4. Unsatisfactory	19	3.9	] 4.5
5. Weak	3	0.6	
Omissions	8		

Inspection of the table above predictably shows that students are much more confident of their achievement at work than their achievement at school.

3.4 Related to the students' perceptions of their achievement at school, is the issue of how fairly they are treated at school. As explained in the previous chapters, there have been many complaints, especially from the Ministry of Labour, that apprentices are discriminated against in the technical schools. Therefore it was thought that the perceptions of students on the subject would be useful. The responses of the I.T.P. students as a whole did not show strong evidence of resentment against the school, as 45.5% stated that they were treated "fairly" and only 22.4% "not so fairly".(Table 10.7)

Table 10.7 Perception of treatment at school (U71)

Question: How fairly and reasonably does the school treat the students?

	No.	%	
1.To a very high degree	64	12.8	] 45.5
2.To a high degree	163	32.7	
3.Moderately	160	32.1	
4.To a small degree	55	11.0	] 22.4
5.To a very small degree	57	11.4	
Omissions	2		

On further analysis the correlation U2-U71 showed that

there was in fact a strong relationship between "programme type" and "student perception of treatment at school". Contrary, however, to what might have been expected, it was found that it was the vocational students who were more likely to be resentful against their treatment at school. (Chi square 48.71 and $p=0.000$...Kendall's Tau C 0.31 and $p=0.000$..) These findings show that in spite of the Ministry allegations and other evidence presented in the previous chapters, that apprentices are discriminated against, apprentices themselves feel on the whole that they are treated fairly. This of course could be taken as an indication that apprentices are compliant and/or that their desire to go to school is so great, that it outweighs other considerations.

3.5 Another question that aimed at examining the spirit of compliance among students was on whether all students, including apprentices, should wear uniform at school. The issue of uniform became quite explosive shortly before the present survey was carried out, as vocational students demanded that, as they attended school only three days a week, and as they were in their final year, they should not be made to wear uniform. Schools refused the students' demands, and when some of them tried to attend school with no uniform, they were sent home. The apprentices, on the other hand, in most schools do not have to wear uniform.

In spite of the fact that students were requested to express their views on a matter that had obviously caused some turmoil in the schools, the responses showed that students were divided on the subject. Thus 42.6% were for uniform, 44.9% against and 12.4% were uncertain. (Table 10.8) Considering the circumstances and the nature of the question, these findings seem to be a further indication that students are compliant.

Table 10.8 School Uniform (V69)

Question: All students, including the apprentices, should wear uniform at school.

Responses:

1. Strongly agree	139	27.9%	] 42.6%
2. Agree	73	14.7	
3. Uncertain	62	12.4	
4. Disagree	54	10.8	] 44.9%
5. Strongly disagree	170	34.1	
Omissions	3		

Correlation V2 _ V69 showed there was no significant relationship between "programme type" and "school uniform". In fact of the apprentices 43% were for uniform, 41.9% were against, and 14.7% uncertain. These findings are very revealing as they show that almost half the apprentices actually want uniform to be introduced for apprentices as well. This may be interpreted as an indication that these apprentices feel the need to "belong" to the school.

3.6 A more general question than the above that was put to students was how strict they thought the school

discipline was. Here there was no doubt that the majority of students thought that discipline was very strict, with 67.8% saying it was strict and only 8.2% saying it was lax. (Table 10.9)

Table 10.9 School Discipline (U70)

Question: How strict do you think is the school discipline?

Responses:

1. Very strict	151	30.2%	] 67.8%
2. Strict	188	37.6	
3. Moderate	120	24.0	
4. Lax	14	2.8	] 8.2%
5. Very lax	27	5.4	
Omissions	0		

It needs to be noted that the fact that students think of discipline in their schools as being strict, does not of course necessarily imply that students are critical of the school. It may be said, however, that the findings add weight to the earlier observation that students are on the whole compliant, since although they feel discipline is strict, their responses showed that they do not feel rebellious against the system.

It is also interesting to note that when U2 was correlated with U70, it was found that vocational students are more likely to feel that school discipline is strict (chi square 10.83, $p=0.028$ _ Tau C -0.11325, $p=0.01$) This finding was to be expected as apprentices spend much more time in industry where conditions are more regimented than at school.

3.7 Students' aspirations were also explored. Firstly, as in Cyprus there is a very strong and widespread ambition among the youth to proceed to higher education, the I.T.P. students were asked how they rated their own chances of continuing their education at an institution of higher learning. The responses showed that 14.1% of the students rated their chances as "many" or "considerable", 56.5% "few" or "none at all" and 29.5% as "fair" (U75). Judging from what was said previously about the I.T.P. students' academic standard, the above figures are unrealistically high.

By using an open question students were also asked to state their greatest career ambition. By far the greatest number, (54.4%), said that they would like one day to own their own workshop. The second biggest group (24.8%) stated that they would simply like to become good craftsmen, 10% said that they just wanted to become supervisors, and 5.4% wanted to follow some professional career. These were followed by smaller groups who had ambitions to enter the civil service, become professional footballers, simply make money, and 4 students (0.9%) stated that they had no ambition at all (U76). The findings show that the students' aspirations are quite realistic, as their top three declared ambitions are not beyond their reach. This is because, (a) a great number of craftsmen in Cyprus own their own workshops, (b) it is almost certain that all

of them would eventually become quite good craftsmen, and (c) some of them will become supervisors in bigger factories.

Finally students were asked to say what chances they felt of having their previously declared ambition realised. A substantial majority of students, 62.6%, answered that their chances were "many" or "considerable", compared with 13.1% who were pessimistic, (a few or none at all). Another 24.1% were undecided (fair) _ (U77). Statistical analysis showed that apprentices were more likely to be optimistic than vocational students. (Chi square 26.853, $p=0.0001$ _ Kendall's Tau C 0.241, $p=0.000$) On the strength of the above, it can be said that I.T.P. students are quite optimistic as to their future.

3.8 Summary.

The findings presented in this section showed that students accept, up to a point, that they are academically weak. Also, judging from the responses of students on (a) how they are treated at school, (b) their views on school uniform, and (c) school discipline, it may be said that students are quite compliant. As to their aspirations, it was found that their educational expectations were rather

unrealistically high. Their career ambitions however were quite realistic. Finally it was found that the I.T.P. students look to the future with optimism.

4.0 Student Perceptions of the Industrial Training Programme.

This section will examine two hypotheses. The first hypothesis is that the I.T.P. students are satisfied with the I.T.P. programme. The second hypothesis is that compared with vocational students, apprentices are more satisfied with their programme.

In order to test the first hypothesis, students were asked a wide range of questions which covered various aspects of the programme. These could be grouped under the following headings:

- (a) Student perceptions of the programme relevance,
- (b) students perceptions of the programme effectiveness,
- (c) student attitude towards work,
- (d) student perceptions of the social climate in the place of work, and
- (e) student perceptions of cooperation between school and industry.

In order to test the second hypothesis, the variable "programme type", (V2), was correlated with each one of the variables included in the groups in the previous paragraph.

4.1 Student Perceptions of Programme Relevance.

Student perceptions of the programme relevance were investigated by asking students their views on:

(a) how related their work experience was to their trade,

(b) how work experience had helped them understand better the knowledge and skills they needed in order to work efficiently in their trade,

(c) how far what they were learning at the job site would be helpful to them later in their career,

(d) whether on the job site they were given work which helped them learn their trade,

(e) whether what they were taught at school and what they did at work matched,

(f) whether at work they used the theory they were taught at school, and

(g) whether at work they used the practical skills they were taught at school.

The findings from the above questions together with the relevant analyses are given below.

4.1.1 The responses showed that the great majority of students, (81.4%), believe that their work experience is related to the trade they are taught at school. The details of the responses are presented in Table 10.10.

Table 10.10 Work experience in relation to Trade (U7)

Question: My work experience is related to my trade

Responses:

1. Very much	323	65.4%] 81.4%
2. Quite a lot	79	16.0	
3. Somewhat	46	9.3] 9.3%
4. Just a little	34	6.9	
5. Not at all	12	2.4	
Omissions	7		

The $U_2=U_7$ correlation showed that there is no significant relationship between the programme type and the students' perceptions of work experience in relation to the trade they are taught at school (chi square 4.81 $p=0.3067$)

4.1.2 In order to test the sincerity of the responses of students, a differently phrased second question, on how related the programme was to their trade, was included in the questionnaire. The second question, which for obvious reasons was placed at a later stage in the questionnaire, required students to state whether they are given work on the job site which helps them learn their trade. The responses were on a very similar pattern to those in the first question, indicating thus that the students' responses were consistent. The details of the responses were as follows. (Table 10.11)

Table 10.11 Job Site Work Relation to Trade (U13)

Statement: On the job site I am given work which helps me learn my trade

Responses:

1. Very often	247	49.6	] 79.1%
2. Often	147	29.5	
3. Sometimes	74	14.9	
4. Rarely	15	3.0	] 6.0%
5. Very rarely	15	3.0	
Omissions	3		

The chi square analysis (U2-U13) showed that apprentices are much more likely to think that the work given to them in industry helps them learn their trade ($p=0.0009$, Kendall's Tau C 0.1837, $p=0.0001$)

4.1.3 The students' perceptions of the relevance of the programme was further investigated by asking them to state to what degree their work experience programme had helped them determine the type of knowledge and skills most needed in their trade. Again the great majority of students, (76.4% to 3.6%), expressed the view that the programme was useful in this respect. Details of their responses to a relevant question are shown in Table 10.12.

Table 10.12 Promotion of Trade Understanding (U9)

Statement: My work experience has helped me to understand better what type of knowledge and skills I need in order to work efficiently in my trade

Responses:

1. Very much	233	47.0%	] 76.4%
2. Quite a lot	146	29.4	
3. Somewhat	99	20.0	
4. Just a little	8	1.6	] 3.6%
5. Not at all	10	2.0	
Omissions	5		

The chi square analysis showed that apprentices feel to a greater degree than the vocational students that their work experience has helped them understand better which skills are needed for the industry ($p=0.0321$), Kendall's Tau C 0.296, $p=0.000$.

4.1.4 The usefulness of the job site learning in their future career, was considered to be another facet of the students' perception of the relevance of the I.T.P. As the responses in table 10.13 show, the majority of students, (84.7% to 4.4%), thought that the programme would be useful in this respect as well.

Table 10.13 Effect of Job Site Learning on Future Career.(U10)

Statement: I think that what I am learning now at the job site will be helpful to me later in my career.

Responses:

1. Very much	304	61.0%	] 84.4%
2. Quite a lot	118	23.7	
3. Somewhat	54	10.8	] 4.4%
4. Just a little	13	2.6	
5. Not at all	9	1.8	
Omissions	3		

The correlation between the responses of the two groups showed that apprentices think to a greater degree than vocational students that whatever they learn in industry will help them later ($p=0.0084$). The difference of opinion is considerable (Kendall's Tau C = +0.15, $p=0.00$)

4.1.5 Conclusion.

The findings in section 3.1 support the hypothesis that students believe that their industrial programme is relevant to the trade they are taught at school. Further statistical analyses have consistently shown that apprentices consider the programme more relevant than do the vocational students.

4.2 Student Perceptions of the Programme Effectiveness and Efficiency.

In order to explore their views on the effectiveness and efficiency of the programme, students were asked a number of questions on such issues as the planning of work experience, the suitability of work in relation to student ability, the quality of instruction given in industry, the content of training, and the quality of equipment in industry. Details and analyses of responses to these questions are given in the following paragraphs.

It should perhaps be noted that the subject of relevance that was covered in section 3.1, and the subject of effectiveness which is dealt with in the present section are obviously closely associated. Therefore some of the questions included in this section might have been included in the previous section and vice-versa. Such changes, however, would in effect be immaterial and should not affect the general argument presented in the chapter, as both sections examine the same hypothesis.

4.2.1 As the planning of training is a necessary part of both the effectiveness and efficiency of a programme, students were requested to express their views on how well planned their own programme was. The responses showed that the majority of students, (69.9% to 12.0%), feel that their programme of work is well planned. (Table 10.14)

Table 10.14 Planning of Work Programme (V30)

Statement: My supervisor in the industry has a well planned programme of work for me.

Responses:

1. Very often	184	37.1%	] 69.9%
2. Often	163	32.8	
3. Occasionally	90	18.1	] 12.0%
4. Seldom	32	6.4	
5. Never	28	5.6	
Omissions	4		

The chi square analysis showed that apprentices are much more likely to think that their supervisors plan their work well ($p=0.0094$, Kendall's Tau C 0.1688 and $p=0.0003$)

4.2.2 The great majority of students, (79.0% to 4.6%), hold the view that the type of work they are asked to do at the job site is well suited to their abilities (Table 10.15)

Table 10.15 Suitability of Work in Relation to Ability.(V31)

Statement: I feel that the type of work I am asked to do at the job site is well suited to my abilities.

Responses:

1. Always	206	41.5%	] 79.0%
2. Often	186	37.5	
3. Occasionally	81	16.3	] 4.6%
4. Seldom	12	2.4	
5. Never	11	2.2	
Omissions	5		

The chi square analysis showed that the apprentices, more than the vocational students, are likely to feel that the work they do in the industry is well suited to their abilities (p=0.0046, Kendall's Tau C 0.176 and p=0.001)

4.2.3 In order to seek their opinion on the instruction they received during their industrial training programme students were asked whether they were given in industry full and clear explanations on how to perform their duties. The responses showed, as Table 10.16 indicates, that the great majority, (81.0% to 7.2%), rated the programme highly in this respect.

Table 10.16 Clarity of Instruction (V16)

Statement: In the industry I am given full and clear explanations on how to perform my duties.

Responses:

1. Very often	230	46.0%] 81.0%
2. Often	175	35.0	
3. Sometimes	59	11.8	
4. Rarely	13	2.6] 7.2%
5. Very rarely	23	4.6	
Omissions	1		

The chi square analysis showed that the apprentices are more likely than the vocational students to think that they are given good instruction in industry (p=0.0446, Kendall's Tau C 0.05573 and p=0.1203)

4.2.4 Students were also requested to state whether the quality of training they received was the best the firm could provide. Again the same proportion of students as in the previous questions, about 80%, expressed their approval of the training they received. Details are shown in Table 10.17.

Table 10.17 Quality of Training (V17)

Statement: I believe that the training I am receiving during my job experience is the best that the firm could provide.

Responses:

1. Strongly agree	236	47.2%	] 80.0%
2. Agree	164	32.8	
3. Uncertain	68	13.6	] 6.4%
4. Disagree	13	2.6	
5. Strongly disagree	19	3.8	
Omissions	1		

The V2-V17 correlation showed that apprentices are more likely to feel that the training they receive is the best under the circumstances (chi square 11.36 and $p=0.025$, Kendall's Tau C 0.103 and $p=0.010$)

4.2.5 It is expected that during their training programme, students should cover the whole range of work they are taught at school. They were thus requested to express their opinion as to how far this objective was covered in their own case. The responses showed that most students, (58.9% to 12.6%), believed that their training in industry was wide enough to cover the syllabus taught at school. (Table 10.18)

Table 10.18 Range of Training (U18)

Statement: The nature of work in the industry where I have my training is so wide that it could cover all sections of the technical syllabus that are taught at school.

Responses:

1. Yes, absolutely	136	27.5%	] 58.9%
2. Yes, to a great degree	155	31.4	
3. Moderately	141	28.5	] 12.6%
4. No, it is rather limited	25	5.1	
5. No, it is very limited	37	7.5	
Omissions	7		

The U2-U18 correlation showed that apprentices tend, to a greater degree than vocational students, to consider that industry has the potential to cover the requirements of the programme. (Chi square 9.752, $p=0.0448$, Kendall's Tau C 0.14155 and $p=0.021$)

4.2.6 Another aspect of the effectiveness of the programme is this: Does work experience enable students to acquire knowledge and skills that they would not be able to acquire at school? When they were asked on this matter most students answered affirmatively (Table 10.19)

Table 10.19 Substitute of Work Experience by School
(U28)

Statement: During my work experience I acquire knowledge and skills that I would not be able to acquire at school.

Responses:

1. Many	365	73.4%
2. A few	115	23.2
3. None	16	3.2
Omissions	5	

The correlation $U2=U28$ showed that there is no significant difference between the views of apprentices and vocational students as to whether school could substitute work experience ($p=0.07$).

4.2.7 Effectiveness of the teacher-supervisor

The teacher-supervisor has an important role in coordinating the process of integrating all the administrative, organizational and instructional activities of the programme to the benefit of the students. For this reason it was considered necessary to ask the students themselves how much help they receive from their teacher-supervisors. Details of their responses are shown in the table below.

Table 10.20 Degree of help from teacher-supervisors (V26)

Statement: The help I receive from my teacher-supervisor is:

1. Very great	97	19.6%	] 49.6%
2. Considerable	149	30.0	
3. Satisfactory	82	16.5	] 33.9%
4. Small	49	9.9	
5. Non-existent	119	24.0	
Omissions	5		

Inspection of the table above reveals that a considerable proportion of students (33.9%) do not think that they receive adequate help from the teacher-supervisors. Further statistical analysis, through correlation U2-V26, showed that apprentices are likely to be less satisfied with their inspectors (chi square 42.70, $p=0.00$, Kendall Tau C 0.32 and $r=0.00$). In fact a more detailed examination of the responses showed that only 38.8% of the apprentices were satisfied with their inspectors, and 43.9% were not satisfied. These findings cast, of course, serious doubts on the effectiveness of the school supervisory programmes.

4.2.8 Initiative of Students

The degree of initiative that students are allowed in the place of work was also considered to be a measure of the quality of the training programme. Students were therefore asked to state how often their industry supervisor allowed them some degree of initiative. The

students' responses showed that the majority, (60.2%), feel they are allowed initiative "often" or "very often", whilst only 17.2% think they are allowed initiative "rarely" or "very rarely" (Table 10.21)

Table 10.21 Initiative allowed to students (V14)

Statement: My supervisor at the job site asks for my opinion on how a piece of work should be done and I am given some degree of initiative.

Responses:

1. Very often	148	29.7%	] 60.2%
2. Often	152	30.5	
3. Sometimes	112	22.5	
4. Rarely	45	9.0	] 17.2%
5. Very rarely	41	8.2	
Omissions	3		

On correlating the responses from the two groups of students, (V2-V14), it was found that apprentices are far more likely to feel that they are allowed initiative in their work than vocational students (chi square 44.957, $p=0.0000$, Kendall's Tau C indicated that the level of significance is very high (Tau C 0.292 and $p=0.0000$)

4.2.9 Finally students were asked to compare the equipment in the school with that they used in industry. The majority (66.6% to 7.3%) stated that the equipment in industry is more modern (Table 10.22)

Table 10.22 Equipment in Industry compared to that at School (U27)

Statement: The type of equipment I use during my work experience, compared to the equipment we have at school is

Responses:

1. Much more modern	193	39.1%	] 66.6%
2. More modern	136	27.5	
3. About the same	129	26.1	
4. Less modern	24	4.9	] 7.3%
5. Much less modern	12	2.4	
Omissions	7		

Conclusion

The findings in section 4.2 support the hypothesis that students believe that their industrial training programme is effective and efficient. Statistical analyses have also consistently shown that apprentices consider to a greater degree than vocational students, that the programme is effective and efficient.

A notable departure from the above general pattern of responses, however, were the findings on students' perception of teacher-supervisor effectiveness. These showed that a considerable proportion of students feel that they do not receive adequate support from their supervisor. The situation, which seems to be especially bad for apprentices, should be deemed as a serious failure of the system.

4.3 Students' Attitude towards Work.

As stated earlier, one of the criteria of the quality of the industrial training programme was considered to be the students' attitude towards work. The decision to include this item is based on the assumption that a good industrial training programme helps create in students a sound attitude towards work.

In order to assess their feelings on the matter students were requested to answer questions on:

- (a) How much they enjoy working in industry,
- (b) how interesting they find the work at the job site,
- (c) how tired they feel after a full day's work,
- (d) how they would feel if the work experience programme was abolished,
- (e) how conscientiously they thought they worked in industry, and
- (f) whether they would like the days they attend school to be increased or decreased.

In the paragraphs that follow there will be an analysis of the responses to the above questions:

4.3.1 The great majority of students, (73.6% to 6.5%), enjoy working in industry (Table 10.23)

Table 10.23 Students' work enjoyment (V8)

Statement: I enjoy working in the industry.

Responses:

1. Very much	227	45.8%	] 73.6%
2. Quite a lot	138	27.8	
3. Somewhat	99	20.0	
4. Just a little	32	6.5	] 6.5%
5. Not at all	0	0	
Omissions	5		

The V2_V8 correlation showed that apprentices are more likely to enjoy their work than vocational students (chi square 11.326, $p=0.023$). Further analysis showed that the above relationship is quite strong (Kendall's Tau C 0.155 and $p=0.0006$)

4.3.2 The responses also showed that most students by far, (71.0% to 8.2%), find work in industry interesting (Table 10.24)

Table 10.24 Students' Interest in work (V11)

Statement: The kind of work I am doing at the job site is:

Responses:

1. Extremely interesting	184	36.9%	]	71.0%
2. Very interesting	170	34.1		
3. Quite interesting	103	20.7	]	8.2%
4. Not so interesting	30	6.0		
5. Not at all interesting	11	2.2		
Omissions	3			

The correlation V2-V11 showed that apprentices are more likely to find their work in industry interesting (chi square 38.128, p=0.000). Further analysis through Kendall's Tau C showed that this relationship is strong (0.2541 and p=0.000)

4.3.3 The greater proportion of students, (47.3% to 16.3%), stated that they feel tired after a day's work. This is natural since most of the students are occupied in production for the same number of hours as other workers. (Details of responses in Table 10.25)

Table 10.25 Students' Tiredness (V19)

Statement: After a full day's work I feel physically tired:

Responses:

1. Very often	101	20.3%	]	47.3%
2. Often	126	25.4		
3. Sometimes	189	38.0	]	16.3%
4. Rarely	53	10.7		
5. Very rarely	28	5.6		
Omissions	4			

The correlation V2-V19 showed there is no significant relationship between the programme students follow (apprenticeship or vocational streams) and how tired they feel at work (chi square 6.137, p=0.189)

4.3.4 Another question showed that practically all students, (95.4%), feel that they work conscientiously. The details of the responses are presented below in Table 10.26.

Table 10.26 Conscientiousness at Work (V32)

Statement: I work conscientiously at my work and I offer as much as I can:

Responses:

1. Always	383	76.8%] 95.4%
2. Often	93	18.6	
3. Occasionally	14	2.8	
4. Seldom	3	0.6] 0.8%
5. Never	6	1.2	
Omissions	2		

The correlation V2-V32 showed there was no significant relationship between the type of programme and the students' perceived conscientiousness.

The findings of Table 10.26 may be taken as an indication of student approval for the programme. At the same time, however, the findings imply that students are extremely compliant. The researcher was also able to detect a spirit of compliance among students during the conversations he had with them.

4.3.5 In order to gauge their feelings towards their industrial programme, students were asked directly how they would feel if the programme was abolished. According to the pattern of the previous responses it would have been expected that by far the greatest proportion of students would express their disapproval of the abolition of the I.T.P. It was therefore with some initial surprise that the researcher discovered that only 42% of the students indicated that they would regret the abolition of the programme, whilst as many as 36.8% stated that they would be pleased if it was abolished. Details of the responses are shown in Table 10.27.

Table 10.27 Effect of Abolition of the I.T.P. (U22)

Statement: If it were decided to abolish the work experience programme and as a result I had to go back to school on a full time basis:

Responses:

1. I would be very pleased	107	21.4%	] 36.8%
2. I would be pleased	77	15.4	
3. I wouldn't care	105	21.0	] 42.0%
4. I would be sorry	92	18.4	
5. I would be very sorry	118	23.6	
Omissions	2		

On further analysis it was found out that there was no significant relationship either between the student programme and the student views on the abolition of the I.T.P., (U2-U22).

As the findings shown in Table 10.27 seemed to be inconsistent with the student views on the quality and

effectiveness of the programme, the researcher questioned the students further on the matter, in informal chats. These conversations reinforced earlier findings that a substantial number of students, although pleased with the programme itself, would be quite glad to go back to full time education. The general explanation students gave for the apparent contradiction in their attitude towards the I.T.P., was that by being sent to industry, they felt they were the rejects of the school system. A great number of students also blamed the government for taking the easy way out, and sending them to industry, instead of shouldering the full responsibility of their education, as it did with all other students. The ambivalence, of some students was illustrated by the fact that, whilst these students were saying that they would prefer to go back to full time education, they were at the same time stressing the point that they enjoyed being at work. Some of them even said that they hated some of the lessons, yet going to school was for them the right thing to do.

4.3.6 The findings of Table 10.27 were also supported by the responses of students to the question as to whether they would like the days they attended school to be increased, remain the same or be decreased. As would be expected, the proportion of students who wanted an increase in the days they attended school, (39%), was about the same as those who expressed their preference

for the I.T.P. to be abolished in the previous question (36.8%). Almost half of the students wanted the days to remain the same, whilst only a small proportion of students, (13.4%), replied that they would like the days they attended school to be decreased.(Table 10.28)

Table 10.28 Days At School. (V34)

Statement: I would like the number of days I attend school:

Responses:

1. To be increased	101	39.0%
2. To remain the same	232	47.5
3. To be decreased	66	13.4
Omissions	2	

The correlation V2-V34 showed that apprentices were more likely to want an increase of the days they attend school (chi square 15.29, $p=0.0016$, Kendall's Tau C 0.1626 and $p=0.0003$). This finding was predictable as most apprentices attend school only one day a week.

4.3.7 Conclusions.

The findings in this section reflect the complexity of gauging the students' attitude towards work. The first part of this section, which included questions on students' work interest, work enjoyment and work conscientiousness, showed beyond doubt that the great majority of students were favourably disposed towards

work. This set of findings, therefore, supported the general hypothesis that students have a favourable attitude toward the work experience programme.

When the students' feelings, however, were further explored by asking them the crucial question on how they would view the abolition of the I.T.P., a sizeable proportion of students, (36.8%), replied that if the programme were abolished they would be pleased. About the same proportion (39%), in answering another question, stated that they would like to have the days they spend in industry reduced.

The above findings show a degree of ambivalence among certain students, and cast some doubts as to their attitude towards the programme. In conclusion, therefore, it may be said that although students on the whole are favourably disposed towards the programme itself, perhaps because of other external factors, a certain number of students would either like to see the days they spend in industry reduced, or even the programme abolished altogether.

The other general conclusion is that apprentices have generally a more favourable attitude towards work than vocational students. They are, however, more likely to want the number of days they attend school to be increased. This reinforces earlier comment that apprentices feel the need to "belong" to the school and be accepted as normal students.

4.4 Student Perceptions of Social Climate at Place of Work.

The student perceptions of the social climate at the place of work was deemed to be an indicator of the effectiveness of the industrial training programme. This theory is based on the assumption that a pleasant social environment at the place of work is conducive to learning. In order to explore the students' perceptions of the climate at work, they were requested to make comments on, (a) whether people at the job site were friendly, (b) how much they respected people at work, (c) whether people at work respected and trusted them, (d) how often their supervisor criticized them, and (e) whether if they had a problem they felt free to discuss it with their supervisor. The responses to the above questions and short relevant analyses are given below.

4.4.1 The great majority of students, (77.2% to 6.6%), think that people at work are friendly. Details of responses are shown in Table 10.29

Table 10.29 Friendliness at Work (V12)

Statement: The attitude of people at my job site is:

Responses:

1. Extremely friendly	256	51.3%	] 77.2%
2. Very friendly	129	25.9	
3. Quite friendly	81	16.2	
4. Not so friendly	24	4.8	] 6.6%
5. Not at all friendly	9	1.8	
Omissions	2		

The correlation $V2=V12$ has shown that there is no significant relationship between the type of programme and the students' perception of friendliness at the job site.

4.4.2 An overwhelming majority of students, (83.1% to 3.2%), stated that they feel respect and regard for people they work with in industry (Table 10.30)

Table 10.30 Respect of students for Others (V15)

Statement: The respect and regard I have for people at work is:

Responses:

1. Very great	257	51.6%	] 83.1%
2. Great	157	31.5%	
3. Moderate	68	13.7	
4. Little	8	1.6	] 3.2%
5. Very little	8	1.6	
Omissions	5		

When the "programme Type", (V2), was matched with respect of students for others, (V15), it was found that there was no significant relationship between them.

4.4.3 It was considered that it was equally important to find out whether students thought that the respect students had for others was mutual. The responses showed that the majority, (73.1% to 8.0%), thought that the respect was mutual. It should be noted, however, that the proportion of the positive replies was smaller than

those in the previous question (73% to 83%). (Table 10.31)

Table 10.31 Respect of others for students.(U20)

Statement: I feel the respect people have for me at the place of work is:

Responses:

1. Very great	248	49.8%	] 73.1%
2. Great	116	23.3	
3. Moderate	84	18.9	] 8.0%
4. Little	27	5.4	
5. Very little	13	2.6	
Omissions	3		

In spite of the difference between them, the figures in Table 10.31, as well as those in Table 10.29, clearly show that students respect others at work and they also feel that they themselves are respected as well. The very high percentage of positive responses also supports an earlier observation that students show a high degree of compliance.

The U2-U20 correlation indicated that there is no significant relationship between "programme type" and "respect of students for others".

4.4.4 In order to explore the students' perception of the supervisors' behaviour towards them, students were asked whether supervisors were critical of their work. The responses showed that 33.6% of students thought that their supervisor was critical (very often and often),

and 30% thought that he was not (rarely, very rarely).
(Table 10.32)

Table 10.32 Criticism from the Supervisor (V29)

Statement: My supervisor at the job site is critical of my work:

Responses:

1. Very often	57	11.4%	] 33.0%
2. Often	108	21.6	
3. Occasionally	181	36.3	
4. Rarely	85	17.0	] 30.6%
5. Very rarely	68	13.6	
Omissions	2		

It is evident that Table 10.32 is quite evenly balanced. Perhaps it could be said therefore that the above findings neither lend support to the general hypothesis under examination, nor do they reject it.

Further analysis showed that there was no significant relationship between "criticism from the supervisor" (V29), and "programme type" (V2).

4.4.5 The relations between supervisors and students were further investigated by asking students whether they felt they could discuss their problems freely with their supervisor. The responses showed that in this respect there is a very close relationship between students and supervisors (86.5% to 0.2%) (Table 10.33)

Table 10.33 Ease of Communication with the Supervisor
(U33)

Statement: If I have a problem at my work I feel I can discuss it freely with my supervisor.

Responses:

1. Always	195	39.5%	] 86.5%
2. Often	232	47.0	
3. Occasionally	66	13.4	] 0.2%
4. Seldom	1	0.2	
5. Never	0	0.0	
Omissions	7		

Further analysis, (U2-U33), showed that apprentices were less likely to feel any inhibitions about asking the supervisor's help if they had a problem (chi square 15.29, $p=0.0016$, Kendall's Tau C 0.163, $p=0.0003$).

4.4.6 Conclusion

The findings of this section show that students regard the place of work as friendly, they respect the people they work with, they feel the respect is mutual, and they have very good relations with their supervisors. All these findings support the general hypothesis that students are satisfied with their industrial training programme.

The statistical analyses of the above findings further showed that there is no significant relationship between the "programme type" and the "social climate" of the place of work. The only exception to the general pattern

was the correlation U2_U34 which showed that apprentices are likely to feel more comfortable about discussing their problems with their supervisor than the vocational students.

The analyses further showed that there is no significant relationship between the social climate and the size of the firm in which students worked.

5.0 Students' Perception of the Institutional Programme

5.1 The students' perception of the institutional programme was explored by asking their views on : (a) how compatible they found the school programme and their work experience, (b) whether they were given the opportunity at school to discuss their experiences at work, (c) whether they used the theory and skills they were taught at school during their industrial training programme, (d) whether there should be changes in the allocation of periods among the various subjects they were taught at school, (e) how easy they found the various subjects included in their school programme, (f) how they liked these subjects, and (g) how useful they thought these subjects were.

5.2 On the first question the majority of students, (66.4%), answered that they found their school programme and their work experience compatible. Only 14.2% of the

students found them incompatible and 19.2% were neutral on the issue. Details of the responses are given in the table below.

Table 10.34 Compatibility of school programme and work experience (V21)

Statement: What I am taught at school and what I do at work match.

Responses:	N.	%	
1. Very well	188	37.7	] 66.4%
2. Quite well	143	28.7	
3. Fairly well	96	19.2	
4. Only a little	34	6.8	] 14.2%
5. Not at all	37	7.4	
Omissions	3		

When V2 was correlated with V21 it was found that apprentices are more likely to feel that their school programme and their work experience are compatible. (chi square 25.19, $p=0.0001$, Kendall's Tau $C=0.24$ and $p=0.0000$)

5.3 The students' responses to the question whether they are given the opportunity to discuss their experiences in industry, were also on the whole positive. Thus 56.3% responded that they were given the opportunity "very often" or "often", and only 14.0% "rarely" or "very rarely", whilst 29.7% were non-committal (Table 10.35)

Table 10.35 Discussion of work experiences at school (U23)

Statement: At school I am given the opportunity to discuss with my teachers, and share with my mates, the experiences I have in industry.

Responses:	N.	%	
1. Very often	99	19.8	] 56.3
2. Often	182	36.5	
3. Sometimes	148	29.7	
4. Rarely	27	5.4	] 14.0
5. Very rarely	43	8.6	
Omissions	2		

When U2 was correlated with U23, it was found that there was no significant relationship between the two variables.

5.4 On the subject of whether, during their work experience they use the theory they were taught at school, the pattern of responses was similar to the one for the previous question, with 57.4% answering affirmatively, 18.2% answering negatively and 24.4% being neutral. (Table 10.36)

Table 10.36 Use at work of theory taught at school (U24).

Statement: During my work experience I use the theory I was taught at school.

Responses:	N.	%	
1. To a great degree	73	14.7	] 57.4
2. Considerably	212	42.7	
3. Somewhat	121	24.4	
4. To a small degree	55	11.1	] 18.2
5. Never	35	7.1	
Omissions	5		

When V2 was correlated with V24, it was found that there was no significant relationship between the two variables.

5.5 On a similar question as to whether they use at work the practical skills they were taught at school, there was a drop in non-committal responses and a slight increase in both the positive and negative responses (Table 10.37)

Table 10.37 Use at work of skills taught at school (V25)

Statement: During my work experience I use the practical skills I was taught at school.

Responses:	N.	%	
1. To a great degree	85	17.1	] 60.3
2. Considerably	215	43.2	
3. Somewhat	93	18.7	] 21.1
4. To a small degree	66	13.3	
5. Never	39	7.8	
Omissions	3		

When V2 was correlated with V25, it was found that there was no significant relationship between the two variables.

5.6 In order to gauge their feelings towards the subjects they are taught at school (9), students were asked to answer the following questions:

1. Would you like to be taught more, the same or fewer periods for the subject? (V35-V42)
(Check: 1=many more, 2=more, 3=same, 4=fewer, 5=far fewer)

2. How easy do you find the subject at school? (V45-52)

(Check: 1=very easy, 2=easy, 3=appropriate, 4=difficult, 5=very difficult)

3. How much do you like the subject? (V53-V60)
(Check: 1=very much, 2=quite, 3=rather, 4=little, 5=very little)

4. How useful for you is the subject? (V61-V68)
(Check: 1=very useful, 2=quite useful, 3=rather useful, 4=not really useful, 5=not at all useful)

The students' responses for each subject were grouped together in the tables below:- (The figures under columns 1-5 represent percentages)

5.6.1 Greek (10)

Table 10.38 Greek

	Var.	1	2	3	4	5
		%	%	%	%	%
1. Period Allocation	35	10.7	14.6	58.4	9.1	7.2
2. Level of difficulty	45	30.5	30.1	34.9	2.8	1.6
3. Liking	53	25.3	20.6	33.8	16.1	4.3
4. Usefulness	61	23.9	31.4	28.6	9.6	6.5

As there is a general impression that cooperative students are very antagonistic towards general education subjects, especially Greek, the picture presented in the above table is interesting in that it rather disproves this impression. Thus, inspection of the table shows that:

(a) The majority of students (58.4%) would like to have Greek continue to be taught with the same no. of periods as it is taught now. As for those who expressed an opinion that there should be a change, there were more who would like to see the periods increased (25.3%) than decreased (16.3%)

(b) The majority of students (60.6%) find the subject "very easy" or "easy" and only 4.4% "difficult" or "very difficult". Since it is generally acknowledged that cooperative students are very weak in Greek, the responses may be an indication that students are not taxed to their full capacity.

(c) A considerable proportion of students (45.9%) like the subject. This is more than double the proportion of students who do not enjoy the subject (20.4%)

(d) Finally the responses show that the majority of students (55.3%) feel that the subject is useful. Only a relatively small proportion (16.1%) consider the subject not useful. This finding again dispels another theory that cooperative students regard Greek as "a waste of time".

5.6.2 Mathematics

Table 10.39 Mathematics

	Var.	1 %	2 %	3 %	4 %	5 %
1. Period Allocation	36	14.1	24.0	44.1	11.0	6.8
2. Level of difficulty	46	16.0	22.7	37.9	16.6	6.7
3. Liking	54	21.9	19.0	30.7	20.0	8.5
4. Usefulness	62	46.8	31.8	14.6	3.7	3.0

The above table shows that students have even greater regard for Mathematics than for Greek. Thus, a greater

proportion of students, (31.8%, compared with 25.3% for Greek), would like to have more periods of Mathematics. It is also interesting to note that the majority of students, (60.6%), find Mathematics easy, which, as in the case of Greek, is contrary to the general impression that cooperative students cannot cope with the subject. Again, contrary to what might generally be expected, more students seem to like Mathematics, (40.9%), than not. Finally the great majority of students, (78.7% to 6.7%) regard Mathematics as very useful.

5.6.3 English(11)

Table 10.40 English

	Var.	1 %	2 %	3 %	4 %	5 %
1. Period Allocation	37	18.0	21.3	46.4	8.2	6.1
2. Level of difficulty	47	13.9	23.4	41.0	15.7	6.0
3. Liking	55	23.3	20.2	30.1	19.3	7.1
4. Usefulness	63	46.6	30.2	16.8	2.7	3.7

Comparison of tables 10.39 and 10.40 would show that there is great similarity in the pattern of responses for Mathematics and English. Thus, students would on the whole like to have more periods of English, they do not find it difficult and they rather enjoy the subject. Another significant finding is that, in the same way as for mathematics, the great majority of students,

(76.8%), think of English as being "useful" or "very useful".

5.6.4 Physics (12)

Table 10.41 Physics

	Var.	1 %	2 %	3 %	4 %	5 %
1. Period Allocation	38	5.1	11.3	51.8	22.2	9.7
2. Level of difficulty	48	8.1	25.2	49.6	12.8	4.3
3. Liking	56	11.5	14.2	37.9	24.1	12.3
4. Usefulness	64	9.9	24.4	33.2	19.5	13.0

The findings show that Physics is not very popular. Thus, almost twice as many students, (31.9%), would like to be taught fewer periods of Physics than would like to be taught more, (16.4%). There are, however, more students who find the subject easy rather than difficult, (33.3% compared with 17.1%). On the other hand fewer students seem to like the subject, (25.7% compared with 36.4%), and they are very ambivalent as to the subject's usefulness, (34.3% to 32.5%).

5.6.5 Technology

Table 10.42 Technology

	Var.	1 %	2 %	3 %	4 %	5 %
1. Period Allocation	39	27.8	27.6	36.7	6.0	1.9
2. Level of difficulty	49	19.8	26.3	42.3	8.9	2.6
3. Liking	57	40.1	26.2	23.3	6.3	4.1
4. Usefulness	65	72.4	18.5	6.5	1.0	1.6

Predictably, the findings show that the subject of technology is very highly thought of. Thus, 52.4% of the students would like to have more periods of technology compared with 7.9% who would like fewer. Students find the subject easy rather than difficult, (46.1% to 11.5%), and they like it, (66.3% to 10.4%). Finally, the great majority of students, (90.9%), find the subject useful.

5.6.6 Technical Drawing

Table 10.43 Technical Drawing

	Var.	1 %	2 %	3 %	4 %	5 %
1. Period Allocation	40	25.3	22.5	39.2	8.4	4.6
2. Level of difficulty	50	27.1	29.2	32.4	8.6	2.7
3. Liking	58	41.4	26.5	21.0	7.3	3.7
4. Usefulness	66	64.7	19.3	10.3	2.8	2.8

Inspection of Table 10.43 reveals that the pattern of responses is very similar to that of Technology: A considerable proportion of students, (47.8%) would like

to have more periods of Technical Drawing, compared with 13.0% who would like to have fewer. Also the majority of students find the subject easy, (56.3% compared with 11.3%), they like it, (67.9% compared with 11.0%), and find it useful, (84.0% compared with 5.6%)

5.6.7 Workshops

Table 10.44 Workshops

	Var.	1 %	2 %	3 %	4 %	5 %
1. Period Allocation	41	36.3	25.5	25.9	8.0	4.3
2. Level of difficulty	51	43.7	22.6	31.5	1.2	1.0
3. Liking	59	60.2	18.2	14.1	4.9	2.7
4. Usefulness	67	78.2	14.3	4.2	1.8	1.4

Very predictably the subject of Technical Workshops is the most popular subject. More students would like to have more periods of workshops, more students find the subject easy, more students enjoy the subject and more students consider the subject useful, than for any other subject in their curriculum.

5.6.7 Mechanics (13)

Table 10.45 Mechanics

	Var.	1 %	2 %	3 %	4 %	5 %
1. Period Allocation	42	4.0	8.9	37.1	27.4	21.8
2. Level of difficulty	52	4.9	4.9	30.9	39.0	20.3
3. Liking	60	6.5	10.6	13.8	48.0	21.1
4. Usefulness	68	16.5	9.4	26.8	29.1	18.1

Mechanics is the least popular subject. The findings show that students find it on the whole difficult, they do not enjoy it, they do not find it useful and therefore they want to have fewer periods of this subject.

5.7 Summary and Concluding Comments

The findings in this section have shown that on the whole students have a favourable opinion of the school programme. Firstly, the compatibility of the school programme with the work experience was investigated with three questions. In the first question they were asked directly whether the two parts of their programme were compatible, and in the other two they were asked whether in their work experience they used (a) the theory, and (b) the workshop skills, they were taught at school. In all three cases the majority of responses showed that students believe that the school programme and the industry programme are compatible.

Another question which aimed at testing in an indirect way the compatibility of the programmes, was on whether students had the opportunity to discuss with their teachers at school their experiences in industry. The maintenance of close links between the two parts of the programme is naturally of crucial importance to the success of the programme, and discussing the work experiences of students in the classroom is a very good

way of promoting such links. The responses to this question, therefore, the majority of which were affirmative, are a further indication that students believe that the two parts of the programme are compatible and also that there is an effort to "marry" theory and practice.

The other set of questions aimed at gauging the students' attitude towards the various subjects they are taught at school. As has been indicated already, the general feeling among teachers of general education subjects is that cooperative students are either hostile towards, or not interested in, the general education subjects. These feelings have not been substantiated by the findings of the survey. On the contrary, in the case of Mathematics and English, and to a slightly lesser extent in Physics and Greek, the responses show that the majority of students have a healthy respect towards the curriculum. The only subjects which students seem to resent are Mechanics, and to a lesser extent Physics, both of which are taught to vocational students but not to apprentices.

On further investigation it was found that both these subjects are taught in a very theoretical way. The course is overburdened with material and practically no experiments are carried out. Instead, a mathematically-based approach to the subjects is used,

which seems to be quite unsuitable for the students of the cooperative programme. These findings point to the fact that perhaps a solution to the problem would be to incorporate both mechanics and physics in the subject of technology (14).

On the other hand, the responses predictably showed that students are happier with technical subjects.

Finally the point needs to be made that the overall picture presented in this section is that students are very compliant.

6.0 Choice of Trade

6.1 Introduction

An important aspect of the work experience programme is that it allows the student to obtain an awareness of what his trade really entails. Since therefore the student normally obtains his first real experiences of his trade during his training programme, it may be assumed that his perceptions of the trade will not only depend on the merits of the trade per se, but also on the quality of the programme itself. Consequently when this chapter examines whether students are pleased with their choice of trade, or whether they have regretted choosing it, the findings can also be seen as a reflection of the students' perception of the quality of the programme.

In order to explore the students' feelings on their choice of trade, they were asked: (a) whether the trade they are learning now is the one they wanted to follow when they first entered the school, (b) if not, why they did not enroll in the trade they wanted, (c) how pleased they were with their present occupation, (d) if they were completely free to choose again, which occupation they would have liked to follow, and (e) whether they were satisfied with their present wages.

The analyses and responses to the above questions are given below.

6.2 The majority of students, (76.7%), stated that they were in the trade they originally intended to follow when they entered school, whilst the remaining 23.3% said they were not. (Table 10.46)

TABLE 10.46 Satisfaction with Original Choice. (U72)

Statement: The trade that I am learning now is the one I wanted to follow when I first entered the technical school.

Responses:

1. Yes	379	76.7%
2. No	115	23.3%
Omissions	7	

The correlation U2-U72 showed that there is much more likelihood of an apprentice following the trade of his choice than there is of a vocational student doing so. (chi square 16.164, $p=0.0028$, Kendall's Tau C 0.154 and

p=0.0011) This finding is to be expected as apprentices enroll after they have found a job. They have thus no restriction from the side of the school to enter the trade of their choosing. The vocational students, on the other hand, as they are already in the school system, may be refused entry to a trade for a variety of reasons. These are explored below.

6.3 Students were presented with five alternative reasons why they did not follow the trade of their choice, and they were asked to state the most important that applied in their own case. They were also requested to write down their own, if none of the five reasons applied. The responses are shown in Table 10.47.

Table 10.47 Reasons for not following Trade of Choice (V73)

Statement: The main reason that I did not enroll for the trade I wanted is:

Responses:

1. There were no places available	34	28.3%
2. The trade was not taught at school	22	18.3
3. Other people pressured me	20	16.7
4. I was too weak in certain subjects	34	28.3
5. The pay was too low	6	5.0
6. Any other (specify)	4	3.3

By inspecting the above table, it can be seen that almost half the students, (46.6%), blamed the system for either not providing enough places or not providing at their school the trade of their choice. This proportion would be even higher if it was taken into consideration that among those who pressured students, there were

perhaps teachers. It is also noteworthy that very few students rejected a trade for financial considerations. Finally, as the table shows, about one fourth of the students felt they were unable to pursue the trade of their liking because they had academic problems. In this respect, it needs to be noted that a state school in Cyprus cannot legally refuse to register a student on reasons of academic merit. According to the Cyprus Education Law, once students successfully complete the first cycle of studies, they are eligible to enroll in any specialisation they like, provided of course there are places available. The above students, therefore, were either persuaded by others not to enroll in a particular trade, or they realized by themselves that if they enrolled they could not make the grade.

6.4 Very important was the question put to students on how pleased they were with their occupations. About 72% of the students expressed their satisfaction with their occupation, and only about 12% stated that they were not pleased, whilst 16% were undecided. (Details in Table 10.48)

Table 10.48 Satisfaction with Occupation (V74)

Question: How pleased are you with your occupation?

Responses:

1. Very pleased	164	33.4%	} 71.9%
2. Quite pleased	189	38.5	
3. Uncertain	78	15.9	
4. Not pleased	41	8.4	} 12.3%
5. Not pleased at all	19	3.9	
Omissions	10		

By correlating the above with the type of programme, it was found that apprentices are more likely to be pleased with their occupation (chi square 25.24, $p=0.0000$, Kendall's Tau C 0.156 and $p= 0.0007$)

6.5 In order to explore further their attitude towards their trade and the kind of work they were doing, students were asked to state three occupations, different from their own, which they would choose had they been completely free to do so.

The researcher classified the occupations into two categories, craft trades and white collar jobs. Based on this classification, the responses were placed into four groups; (a) those whose options were all three craft trades, (b) those with two craft trades and one white collar job, (c) those with one craft trade and two white collar jobs, and (d) those with three white collar jobs. The responses were as follows.

Table 10.49 Alternative Occupations (U78)

Statement: If I were completely free to choose again another occupation to the one I have now, I would choose one of the following three occupations:

Responses:

1. Three craft trades	213	47.1%
2. Two craft trades and one white collar	100	22.2
3. Two white collar, one craft	65	14.4
4. Three white collar	67	14.8
5. Omissions	56	

The findings in the table above disprove the theory that students who follow craft trades do so reluctantly, and that they would prefer to have white collar jobs. It is also worth noting that the proportion of students in the first two categories (69.3%), who obviously would rather have a craft trade to a white collar job, is the same as the proportion who stated that they are pleased with their present occupation (71.9%).

In this respect the occupational preferences of the I.T.P. students are entirely different to those of the rest of the student population. Thus the Pedagogical Institute Survey found the following as regards the professional preferences of the total student population. (The two columns represent the socioeconomic background of students).

Table 10.50 Occup. Preferences of Students (National Survey)

Profession	Preference		
	High Socioeconomic Level	Non_high Socioeconomic Level	
Academic profession	88.1%	70.1%] 77.3%
Clerical workers	2.7	7.2	
Service workers	3.1	6.6] 16.3%
Labourers	0.0	1.4	
Skilled labourers	1.7	6.1	
Construction workers	0.3	1.8	
Housewife	0.0	0.4	

It should be noted that the above survey included students of technical schools, who represent 19% of the total student population. It may be assumed therefore,

that probably the responses in the table above, which indicated preference for blue collar jobs came from technical school students. This would mean that practically the entire remaining student population, that is all those who attend general schools, prefer white collar jobs.

6.6 Remuneration

Finally when students were asked whether they were satisfied with their wages, the responses were evenly balanced between those who were satisfied, (48.8%), and those who were not, (51.2%), (478). The reader is reminded that on a similar question 82% of the hotel and catering students stated that they were satisfied with their earnings. On further investigation it was found out that hotel students were in fact on the whole much better paid than either vocational students or apprentices. As indicated earlier hotel students were paid around fifty pounds per week. Compared to this, vocational students were paid between fifteen and thirty pounds per week. The researcher also found out that there was a considerable difference in the remuneration of students of the various specialisations. For example, mechanical and electrical trades were paid between fifteen and twenty pounds, whilst builders were paid between twenty and thirty pounds. It is also worth noting that apprentices are paid slightly more than vocational students, presumably because they are

supposed to be more productive.

Judging from the above figures, it seems that the feelings of the high proportion of students who stated they were dissatisfied with their wages, may be fully justified.(15)

6.7 Conclusions

The aim of this section was to examine the hypothesis that students are satisfied with their choice of trade. The responses support the hypothesis as 72% of the students stated that they were pleased with their present occupation, compared to 12% who stated that they were not pleased.

As for the effect that the I.T.P. had on the student satisfaction with their choice of trade, it is significant to note that the proportion of students who eventually followed the trade they originally wanted, the proportion of those who expressed satisfaction with their present trade, and the proportion of those who, if they could choose again, would mainly choose again a craft trade, were about the same (70_76%). On the other hand it should also be noted that a large proportion of students (51%) expressed dissatisfaction with their remuneration. In spite of this, the responses showed that they were not disillusioned enough to change their mind as to their choice of trade. There is a possibility, therefore, that the I.T.P. might have

helped in keeping the students satisfied with their chosen trade.

7. SUMMARY AND GENERAL CONCLUSIONS.

As stated at the beginning of the chapter, the central research question in this chapter was how students themselves viewed the Industrial Training Programme. It was also pointed out that in order to set the findings on the perceptions of students in perspective, it would be useful to explore first the students' socioeconomic background and certain other relevant students characteristics.

Thus, in the course of the chapter it was first established that, judging by the parents' occupation and education, the I.T.P. students come from a lower socioeconomic background than the national average. In the same section, and by using the same criteria, it was also established that the findings did not support the hypothesis that the apprentices come from a lower socioeconomic background than the vocational students.

Further exploration of student characteristics revealed that students are academically weak, although their responses showed that they regard themselves "average". It was also found that they are compliant, their aspirations are not unrealistically high and they look to the future with optimism.

In the following sections the findings supported the

hypothesis that students believed that their industrial programme is on the whole relevant, effective and efficient. The findings also showed that students have a very healthy attitude towards work, since their responses showed that they are interested in work, they enjoy working and they work conscientiously. It was further found that students consider their place of work as friendly, they have good relations with their supervisors and they feel that there is mutual respect between themselves and the people they work with. Finally through their responses students showed that they are pleased with their choice of occupation, although they are ambivalent over their remuneration. Of course it could be said that the favourable attitude of students towards the industrial programme may perhaps be partly or wholly due to their low academic ability and their low socioeconomic background, both of which could dampen their expectations. Their compliance could also have affected their perceptions of the I.I.P.

Another significant finding that needs to be noted is that statistical analyses have shown that, on practically each one of the above issues, apprentices are more likely to be more favourably disposed towards the I.I.P. than vocational students. This observation of course in no way minimises the fact that collectively the findings show convincingly that I.I.P. students as a whole, including the vocational students, approve of the programme. It seems therefore paradoxical, that in spite of their declared approval, a substantial proportion of students (36.8%) declared that they would be pleased to

see the programme abolished, or curtailed. As indicated before the phenomenon is probably due to the existence of very strong social norms in the island which create the impression that any programme short of full-time school education is not worthwhile.

Finally it needs to be noted that the findings in this chapter lend support to a main assumption of this research, that cooperative programmes could offer significant economic, social and pedagogical benefits. For, in spite of its serious limitations and weaknesses, the present system of cooperative education is perceived by the majority of a section of the student population as satisfying their educational and training needs. It could be argued, therefore, that an improved system could in fact offer far greater benefits.

NOTES AND REFERENCES

1. The views of the hotel and catering students were explored under a separate questionnaire. Their responses were analysed in the previous chapter.

2. This was to be expected as there are no females registered in the sixth vocational classes and only one third year class of female apprentices in the trade of dress-making.

3. These were the social background indicators use by Psacharopoulos and Loxley in their study "Diversified Secondary Education and Development" (unpublished World Bank Report), 1984

4. Metzger et al: The Socialization of Adolescents in Cyprus. Pedagogical Institute of Cyprus, Dec.1982.

5. It needs to be noted that the national survey covered all secondary students between 12 and 18, whilst the survey for the present study was addressed to cooperative students who are in the age group 15 _ 18. It was assumed, however, that the difference in the age groups does not affect the comparison, as the fathers' occupations of students between 12 _ 15 should not be different from those in the age group 15 _ 18. It is also noted that in order to facilitate the comparison between the two surveys, the researcher chose to use a scale of occupations similar to the one used in the Institute survey.

6. The reason for grouping the first three categories together is that there is normally a big difference in remuneration between this group and the remaining occupational categories.

7. An interesting outcome of the survey is that, by comparing Tables 8.3 and 8.4, it can be seen that the fathers of both groups receive more education than the mothers.

8. The general impression that I.T.P. students are academically weak is supported by the following surveys: (a) Academic Ability of Students in the First Year of Technical Schools, (b) Choice of Specialisation in the Technical Schools and in the Lycea, Ministry of Education 1982.

(c) Number of Students and Educational Standards in Technical Education, Ministry of Education, (Technical Education Department), February 1983.

9. For the list of subjects taught and the way periods are allocated, please see Appendix 5.

10. The reader is reminded that Greek is the students'

mother tongue and is taught as the main language subject.

11. English is taught to all students as a second language.

12. Physics is taught to vocational students but not to apprentices.

13. Mechanics is taught to vocational students but not to apprentices.

14. Another solution of course, which is in practice in many countries, is to abolish the dichotomy between "trade theory" and "trade practice" and teach them both together.

15. The issue of the payment of students during their industrial training practice is a controversial one. As R.Miguel says, there are as many who argue that pay should be given to experiential learners as there are those who argue against it. Some deem it an incentive or reward for learning, as well as compensation for work; others think it unnecessary, detracting from the experience itself. (R.J.Miguel: Experiential Education Policy Guidelines, The National Center for Research in Vocational Education, Ohio State University, 1979, p 30.

CHAPTER ELEVEN

TEACHER PERCEPTIONS OF THE COOPERATIVE PROGRAMMES

Introduction.

The aim of this chapter is to explore the teachers' perceptions of the cooperative programmes. The significance of the teachers' views is based on the assumption that for any educational programme to be successful, it is important for teachers to subscribe to its educational ideals. For it may be argued that, though the value of instruction depends to a great degree on the competence and educational skill of the teachers, the attitude of teachers towards the students and the programme, is at least of equal importance. It may be further said that in view of the special nature of the Cooperative Programmes, the significance of the attitude of the staff towards the programmes perhaps outweighs that of their abilities and qualifications.

An investigation, on the other hand, into the teachers' perceptions of the programme, without examining their qualifications and other characteristics might be considered as incomplete. This chapter, therefore, begins with a brief review of teacher characteristics. This is followed by an exploration of the teachers'

views on the following issues: technical school effectiveness, the quality of cooperative students, the nature of the Industrial Training Programme and the role of industry in training young people.

As in the case with students, the main instrument of investigation was a questionnaire administered to teachers. Other sources of information were informal conversations with teachers, observations and various official records. The questionnaires were anonymous in order to promote frankness in the responses. All questionnaires were handed to teachers personally by the researcher, who made sure that those who participated in the survey were made aware of its purpose.

The target population was the teachers who taught cooperative education classes at the state technical schools during 1984 - 1985, including the headmasters and assistant headmasters of schools. The total number of teachers was 485, 195 of whom were general subject teachers and 270 were technical teachers (instructors).

(1) The distinction between the general and the technical teachers was considered to be important. Therefore on some issues the relationship between the views of the two groups was also examined.

The number of teachers was such that it was considered appropriate to request a sample of half the total number

of teachers to participate in the survey. The selection was made by using the schools' staff lists, with every other teacher on the list being administered a questionnaire. As teachers in the staff lists are grouped according to their specialisation, the above method insured that the various subject groups were represented evenly. Thus 243 teachers (96 "general" and 147 "technical") were requested to fill in questionnaires (2). Out of these 226 responded, 88 general and 138 technical.(U1) _ (For breakdown see Appendix).

2.0 Teacher Characteristics.

2.1 Sex and Age of Teachers.

Of the 218 teachers who answered the question, 178 (81.6%) were males. Of the females 25 (62.5%) were technical teachers and 15 (37.5%) were general teachers (U2).

The age of the teachers is shown in Table 11.1

Table 11.1 Age of Teachers (U3)

	Age Range	N	%
1.	20 - 24	-	-
2.	25 - 30	6	2.8
3.	31 - 35	42	19.7
4.	36 - 40	75	35.2
5.	41 - 45	44	20.7
6.	46 - 50	25	11.7
7.	51 - 55	16	7.5
8.	56 - 60	5	2.3

The above figures show that the great bulk of teachers (75.6%) are between the ages of 31 and 45. The age of the teacher population could therefore be taken as being quite mature without being too old.

2.2 Qualifications.

Teachers of general subjects serving in the technical schools belong to the same pool as the other general subject teachers serving in secondary general schools. As a university degree is normally required for appointment as a secondary school teacher, all teachers of general subjects are university graduates. The only exception to this rule is for subjects such as physical education and home economics, when the normal requirement is college education.

The technical teachers, on the other hand, have a varied background as follows;

- (a) university graduates,
- (b) college graduates, and
- (c) experienced craftsmen and technicians recruited from industry, with no paper qualifications except for a secondary school leaving diploma.

In the sample the three groups were represented as follows: University graduates 37%, College graduates 39%

and technicians 24% (U4) The ratio for the three groups for the total target population is about the same.

In addition to their academic qualifications, in order to be appointed, all technical teachers are normally required to have industrial experience. The experience of the teachers in the sample, was as follows;

(a) 22% had no industrial experience at all, (3)

(b) 28% had industrial experience of 1-2 years,

(c) 27% had 3-5 years,

(d) 12% had 6-10 years,

(e) 4% had 11-15 years, and

(f) 7% had over 16 years. (U6)

The great majority of teachers have also had some form of pedagogical training. In fact all newly appointed secondary school teachers, "general" and "technical" alike are required by law to complete a course of one day a week for a year, before their appointment is made "permanent". The teachers who participated in the survey were requested to state their highest qualification in teacher training or pedagogics. The responses were the following;

(a) 23% had no pedagogical training at all, (4)

(b) 61% had completed the course of the Pedagogical Institute,

(c) 30% had a teachers' certificate obtained after two or three years' full time training, and

(d) 2% had a postgraduate degree in education.(U5)

2.3 Conditions of Service

Technical teachers, including those who teach workshop practice, enjoy the same status as their colleagues of general secondary education, as regards employment and career rights, responsibilities, conditions of service and remuneration (5). All teachers for example, irrespective of the subject they teach, have the same teaching load. This is 26 forty-five minute periods a week when they are first appointed and it drops gradually, with the years of service, to 22 periods.

According to regulations every school has a headmaster, who teaches six periods a week, and an assistant headmaster for every 200 students. Assistant headmasters teach 16 periods a week. Both headmasters and assistant headmasters theoretically belong to the general pool of secondary education. In practice, however, both headmasters and assistant headmasters with a technical background are placed in technical schools only. Of the nine headmasters who were in charge of technical schools at the time of the survey, four had a general education background, and five had a technical background. At the level of assistant headmasters, though, there were 80% "technical" compared to 20% "general".

3.0 Technical School Effectiveness.

3.1 For the purpose of this study, the teachers' perception of school effectiveness was considered to be a useful complement to their characteristics described in the previous paragraphs. The decision to include this section was of course based on the assumption that the teachers' perception of the Cooperative Programmes would be more meaningful, if it was examined in the light of their attitude towards their school.

In order, therefore, to explore the teachers' views on school effectiveness, they were asked to express their opinion on the following issues.

- (a) The efficiency of the school,
- (b) the support they receive during the performance of their duties,
- (c) how the public regards their school,
- (d) causes of dissatisfaction among the teachers.

The findings were as follows:

3.2 Teachers were asked to respond to the following statement: "The technical school is an efficient institution which makes the best possible use of the facilities available to it". The majority, (65.8%), of teachers agreed with this statement, 12.6% disagreed and 21.6% were "uncertain". (V49)

By correlating U1(teacher type) with U49 it was found that technical teachers were much more likely than general teachers to think of the school as efficient, (chi square 14.73, $p=0.0053$, Kendall's Tau C 0.232 and $p=0.0005$). This result was perhaps predictable as general teachers are probably influenced by the fact that their subjects in the gymnasias are more significant and are taught at a higher level than at the technical schools.

In spite of the fact, however, that the majority of teachers thought that the school was an efficient institution, some of the remarks of those who disagreed are worth noting. A number of teachers pointed out that their schools could not possibly be considered as making the best possible use of their facilities, as they are mostly open only in the mornings and very limited use is made of them in the afternoons and evenings.

Other teachers thought that their schools were not efficient, since they did not fulfil the aim for which they were built, that is to provide society with well trained craftsmen and technicians. For this failure teachers blamed the quality of students at school and the lack of books and teaching materials.

3.3 The above issue was further explored by asking teachers to comment on the support they receive from

those responsible to help them solve the special problems associated with the teaching of Cooperative students. Teachers were requested to respond separately for the 6th Vocational and for apprenticeship classes.

The responses as regards the sixth vocational classes were as follows: 31.5% stated that they received "strong" or "very strong" support, 31.5% fair, and 37.0% "little" or "very little" (V50). The correlation V1-V50 showed that technical teachers were much more likely to feel that they were receiving support than general teachers (chi square 17.44, $p=0.0016$, Kendall's Tau C 0.290 and $p=0.0001$)

A similar, though slightly worse, picture was presented by the responses of teachers on the apprenticeship classes. 28.5% stated that they received "strong" or "very strong" support, 26.3% "fair" and 45.1% "little" or "very little" (V51). The correlation V1-V51 showed similar findings to correlation V1-V50, with again the technical teachers more likely to feel they are receiving support (chi square 12.76, $p=0.012$, Kendall's Tau C 0.23 and $p=0.0021$) (6)

The above findings clearly show that general teachers feel they do not receive adequate support from those responsible, that is their headmasters and their inspectors. On further examination it was found that general teachers do not blame so much the headmasters

for their situation as their inspectors, who do not take the initiative to tackle the very serious problems that teachers face in the teaching of their subject. Some typical comments were the following:

"They (the inspectors) are bound by certain anachronistic ideas, so they either cannot or they do not want to face the problems of teaching these students" - Teacher of Greek.

"We have the impression that our inspectors have forgotten us. For six years I have been going to all their seminars and not once have they brought up the problems we face in the teaching of these students" - Mathematics Teacher.

3.4 In a small island society like Cyprus, the teachers' perception of the public image of the school is a very important factor in shaping the teachers' attitude towards the school. It was therefore considered useful to explore the subject. Teachers were thus requested to express their views on two different aspects of the school public image - on how well the school prepares students for educational advancement, and on how well the school trains students for employment. In each case three different responses were requested to cover the three types of programme offered in the technical schools, i.e. technical, vocational and apprenticeship.

3.4.1 On the issue of education advancement, the statement presented to teachers was the following: "The

general impression among the public is that the quality of education offered by technical schools for the purpose of educational advancement of students is...".

The responses to the question were as follows:

Table 11.2 Public Image of how well Students are prepared for Educational Advancement.

	V53	V54	V55
	Technical	Vocational	Apprent.
1. Very high	7.5%	2.8%	2.1%
2. High	23.0] 30.5%	12.5] 15.3%	13.8] 15.9%
3. Moderate	23.5	21.8	22.6
4. Low	39.0]	45.4]	34.9]
5. Very low	7.0] 46.0%	17.6] 63.0%	26.7] 61.6%

Inspection of the above responses would indicate that teachers believe that the public image of the schools' ability to prepare its students for educational advancement is rather low. Predictably the technical students' chances are rated higher than those of vocational students and apprentices.

An interesting comment made by some teachers was that technical schools are falling into a trap if they base their status on the number of graduates gaining access to further education, rather than the number of jobs found. It was generally agreed, however, that the pressure from parents who would like their children to proceed to higher studies is such, that the schools could not possibly ignore it.

3.4.2 On the second issue, teachers were presented with

the following statement: " The general impression among the public is that the technical school trains people for employment.....". The responses were as follows.

Table 11.3 Public Image of how well Students are trained for Employment.

	V56	V57	V58
	Technical	Vocational	Apprent.
1. Very well	11.5%]	8.9%]	6.3%]
2. Well	26.5] 38.0%	28.6] 37.5%	22.5] 28.8%
3. Satisf.	39.5	37.6	38.7
4. Badly	21.0]	22.1]	28.3]
5. Very badly	1.5] 22.5%	2.8] 24.9%	4.2] 32.5%

The general picture presented above is that teachers believe that the public do not have a very high opinion of the technical schools' capacity to train students for employment either. The teachers also have the impression that the public believe that technical and vocational students are slightly better trained than apprentices.

3.5 Causes for dissatisfaction.

Finally, in an open question, teachers were asked to state up to three causes of dissatisfaction among teachers. Most of them gave only one cause. The responses were tabulated and the results were as follows:

(a) 66 teachers complained that Cooperative students were of very low standard and were not interested in school work.

(b) 37 teachers complained about the lack of discipline

among the Cooperative students.

(c) 30 teachers expressed their disapproval of the way teachers were evaluated and promoted. They thought it was unfair.

(d) 27 teachers said that they did not have the necessary books or equipment to carry out their work effectively.

(e) 26 teachers complained that their timetable was not well balanced and was causing them hardship.

(f) 16 teachers accused the Ministry and the inspectors of not caring and for wrong policy decisions.

(g) 12 teachers stated that their main cause of dissatisfaction was the presence of apprentices in the school.

A smaller number of teachers named the following causes of dissatisfaction. They are asked to teach subjects in which they had no training; they are asked to do maintenance work in the school, which they feel they should not do; there is no adequate dialogue between students and school; there is a great delay in the initial preparation of timetables so much time is wasted; the school is too lenient with student absenteeism; teachers are unfairly transferred to other schools and other towns; lack of cooperation between teachers, etc.(V52)

3.6 Summary and Conclusions.

The findings presented at the beginning of the chapter indicated that the majority of teachers thought that their school was effective. The general teachers' views on the subject however were more reserved than their colleagues', the technical teachers'.

The picture presented on the kind of support teachers receive from those in authority was not satisfactory, with only one third of the teachers feeling that they are given adequate support. Here again the general teachers gave the impression that they are worse off than their technical colleagues.

On the subject of the public image of the technical schools, the two sets of teachers were in agreement. Their responses showed that they thought that the public does not have a very high opinion of the programmes provided at the technical schools. This impression is bound to have an effect of the teachers' morale. Predictably teachers considered that on the whole the technical stream has a better image than the other two which include I.T. Programmes. The list of causes of dissatisfaction support the above findings, as the top two causes of dissatisfaction were directly related to the presence of I.T.P. students in the school.

From the above the following two general conclusions may

be drawn: the first is that technical teachers on the whole feel that the school is effective. The general teachers however seem to be ambivalent on the subject, and they certainly have many complaints about the system. The second conclusion is that teachers, as a whole, believe that the presence of Cooperative students affects adversely the effectiveness of the schools.

4.0 Where Teachers Prefer to Serve

4.1 In order to investigate how they perceive technical education, teachers were requested to express their views on the following four issues:

(a) Are teachers of general subjects better off in secondary general schools rather than in technical schools?

(b) Should secondary technical education be incorporated into general secondary education?

(c) Which classes do teachers prefer to teach, technical, vocational or apprenticeship?

(d) Should there be separate training centres for students who take the I.T.P.?

The analysis of the responses of teachers in the questionnaires, together with some of their comments, are given below.

4.2 The first question was directed only to teachers of general education, as they were the ones directly

concerned. The great majority (88.3%) expressed agreement with the statement that teachers of general education are better off in the "gymnasia", (65.9% agreed strongly and only 7.1% disagreed)-(U7). The following comments are an indication of the intensity of the teachers' feelings on the matter.

" In the gymnasia students are better disciplined"
(English teacher)

" In the gymnasia we have better prospects for promotion. Here they do not care what we are doing"
(Greek teacher)

" Students here are not interested in our subjects"
(Greek teacher)

" Students in technical schools are very weak" (Maths teacher)

" In the gymnasia work is easier and you are not ashamed of your job" (Physics teacher)

" In the gymnasia, unlike here, they have proper books
(English teacher)

" In the gymnasia you deal with normal students and you have normal timetables" (Greek teacher)

" What I really hate here is having the apprentices and the sixth vocational. Teaching them is difficult."

4.3 The second question in this group was whether technical education should be incorporated into general secondary education by becoming part of L.E.M.(7) This has been a controversial issue in the past few years.

There are some who argue that such a "unification" would actually help technical students because it would remove much of the prejudice against them. The opposite point of view is that such a unification would be disastrous for technical education, as it would make it too academic and theoretical. As expected, the responses to this question were quite mixed - 46.8% stated that they agreed with the unification and 36.7% were against it. The remaining 16.5% were undecided.(V34) Again predictably, the general teachers supported the idea much more strongly than the technical teachers. (Correlation V1-V34: chi square 15.08, p=0.0045, Kendall's Tau C 0.268 and p=0.0002)

Some of the comments made in support of unification were the following:

" There will be better centralised management, better allocation of academic staff, better students will be attracted to technical education" - Headmaster - Physicist.

" The standards in technical schools will improve" - Maths teacher.

" It would stop some of the prejudice against the technical schools" - Joinery teacher.

" It would stop the undeclared war that general secondary education people are waging on us" - Teacher of Mech. Engineering.

" The existence of separate technical schools works to the disadvantage of working class children" - Teacher of

English.

Finally, a technical assistant headmaster said " We feel separated from the main stream of education. This situation does not only affect us teachers, but also it has been one of the main causes of the present lack of prestige and status of technical schools."

Equally strong were the comments from the opponents of unification.

" Such a measure would in the long run have disastrous consequences on industry" - Mech. Engineer.

" Technical education is of special nature and should therefore maintain its autonomy" - Greek teacher.

" Unification of Education may be O.K. in other countries. Here, however, secondary education is still up in the clouds. Its philosophy is such that it would be disastrous for technical education " - Electrical Engineer.

The third question in the section aimed at finding out whether teachers preferred to teach in the technical section, the vocational section, or apprenticeship. The hypothesis that was examined through this question is that the teachers' first choice is to teach in the technical section, the second choice is the vocational and the third apprenticeship. The hypothesis was based on the assumption that teachers would rather teach

secondary general classes. Apprentices, on the other hand, are the furthest removed from their model of "normal student". Teachers were thus requested to state their order of preference. The responses showed that by far the greatest majority of teachers (84.6%) preferred to teach technical, vocational and apprenticeship, in that order. It is worth recording that 95% of the general teachers stated preference for this combination. Details of the findings to this question are shown in Table 11.4 below.

Table 11.4 Subject Preference (UB)

Combination in order of preference	N	%
1. Tech.-Voc.-Apprent.	187	84.6
2. Voc.-Tech.-Apprent.	19	8.6
3. Apprent.-Voc.-Tech.	6	2.7
4. Tech.-Apprent.-Voc.	5	2.3
5. Voc.-Apprent.-Tech.	3	1.4
6. Apprent.-Tech.-Voc.	0	0
7. Do not mind	1	0.5

The above findings support the hypothesis under examination.

4.5 Finally teachers were asked whether cooperative programmes (sixth vocational and apprenticeship) should be run in separate training centres and not at the technical schools. Again this was another issue that has been debated for a long time. The implication of course is that students who work in industry and receive part



time education in schools, have a detrimental effect on other students, so they should be taken somewhere else.

Teachers were requested to express their views separately for each programme. The responses for the sixth vocational were quite evenly balanced - 41.2% agreed that sixth vocational students should be sent to separate centres, 45.7% were against the idea and 13.1% were undecided (V35). Statistical analysis showed that there was no significant relationship in the correlation V1(teacher type)-V35.

The pattern of answers, however, was quite different when teachers expressed their views on apprentices. The majority 67.2% wanted the apprentices to go and only 26.1% thought they should stay, whilst 6.8% were undecided (V36). Here again there was no significant relationship in correlation V1-V36.

Some teacher comments which may illuminate the above findings are the following:

" If it were arranged for apprentices to receive their training in special centres, it would be beneficial for the apprentices themselves. At the same time the wrong impression that is being created that apprentices are students of the school, would be dispelled," - Headmaster, Physicist.

"" Apprentices should go but it would be unfair to drive away the sixth vocational, as some of them have been with us as regular students for five years" - Greek teacher.

" All part-time students should be sent to special training centres because they create problems for the schools " - Plumbing instructor.

" Apprentices do not belong here, they are the responsibility of the Ministry of Labour. With sixth vocational it is different, they are our students, so we cannot drive them away" - Electrical instructor.

4.6 SUMMARY AND CONCLUSIONS.

The analysis in this section has shown the following:

4.6.1 Teachers of general subjects are not happy teaching in technical schools. They would rather teach in general secondary schools, where they believe both conditions of work and career prospects for them are better. The findings show clearly that general teachers do not feel at home in the technical schools. This feeling of not belonging to the school is bound to have some influence on their performance.

4.6.2 It follows from the above that the idea of unification of education would appeal strongly to

teachers of general subjects; for if technical education is incorporated into general education it would probably change its character and become more like the latter. The findings have verified this theory with a somewhat reduced majority. This shows that some general teachers, although they would be happier teaching in a gymnasium, feel that there is a necessity for keeping independent and separate technical schools.

4.6.3 It is interesting to note that a sizeable proportion of technical teachers, (about 30%), support the idea of unification, in spite of the fact that their trade union is strongly against it. In view of the fact that technical teachers feel that technical education is their own domain, and generally feel very uncomfortable with the thought that through "unification" they would be absorbed and lose their identity, the proportion that actually supports unification is quite surprisingly high. One explanation that could be given is that these technical teachers would like to see technical education become more "academic" in order to raise their status. Another explanation is that some teachers are genuinely worried that technical schools are cut off from the main stream of education.

4.6.4 The findings have shown that all teachers, general and technical alike, generally dislike teaching cooperative students and they would like to see them go from the school. The feeling against apprentices is

stronger than that against vocational students. The general conclusion from both the statistical analysis of the responses, and from the comments, is that teachers believe that the cooperative students are a liability. This conclusion is further supported by the findings presented in the next section.

5.0 Certain I.T.P. Policy Issues

5.1 Teachers' views were sought on the following policy issues related to the industrial training programme.

(a) Who ought to be basically responsible for the training of new craftsmen, the state or the industry?

(b) Does the industry have the personnel and the equipment to offer good training to cooperative students?

(c) To which categories of students should the I.T.P. be offered?

(d) How useful is the I.T.P. for the future career of students?

(e) Should the number of days the cooperative students attend school be increased, stay the same, or be decreased?

(f) Should the present system of "day-release" be changed into "block-release"?

It was considered of course that the teachers' perceptions on the above issues would provide a further indication as to the teachers' attitude to the

industrial training programme. The findings are described below.

5.2 The statement on which teachers were requested to respond as regards responsibility for training was the following: "The training of young craftsmen is basically the responsibility of the state and not of the industry". The majority of teachers (63.7%) agreed with the statement, 21.8% were "uncertain" and 14.6% disagreed (V33).

An interesting comment made by a group of teachers is that although the state should be responsible for training, it is important that the basic training policy decisions should not be made by the Ministry of Education alone.

5.3 On the same issue whether industry has the capacity to train students, teachers were very ambivalent. Thus, in responding to the statement that industry has the personnel and equipment to offer good training to students, 36.5% agreed, 30.1% disagreed and 33.3% were "uncertain"(V39). It is worth noting that, as the statistical analysis showed, general teachers were more likely to have favourable views, as to the ability of industry to offer training, than the technical teachers. (Correlation V1-V39:Chi square 11.958,p=0.0177, Kendall's Tau C 0.131 and p=0.04). As technical teachers are normally better acquainted with conditions in

industry this finding is rather significant.

Some of the comments made by teachers on the subject are quoted below:

" In industry they have both the equipment and men, but most employers are not interested in training, they are interested only in production" - Instructor in Mech. Engineering.

" They have the means, but they should be made to offer proper training, by law." - Instructor in Electrical Trades.

" There may be some industries with good equipment. However usually they specialise and they are in no position to offer all round training" - Teacher of English.

5.4 In order to explore further how much teachers value the industrial training programme, an open question was included in the questionnaire, by which they were requested to state which students should participate in some kind of I.T. Programme. Teachers were also requested to make comments on their choice (V37). The replies were tabulated into the following five categories.

1. No students at all	20.4%
2. 6th vocational only (as existing solution)	17.5%
3. More vocational students to include 5th, or 4th and 5th.	16.1%
4. 6th vocational and 6th technical	30.3%
5. All students	15.6%

Inspection of the figures above shows that about 80% of the teachers actually agree that certain students should undergo an I.T. Programme, and only 20% reject it altogether. These findings seem therefore to be out of tune with the previous findings which showed that the majority of teachers did not favour the I.T.P. The apparent inconsistency however is explained by comments made by the teachers. In most cases teachers qualify their response that students should be sent out to gain work experience, by stating that such work experience programmes should not be run during term-time. Some typical remarks are the following:

" Work experience for students is extremely valuable. Such experience however should be obtained during the summer recess, not during school-time" - Headmaster, Physicist.

" Technical students, too, should obtain an awareness of the world of industry. However this could be done during the summer holidays" - Metal trades instructor.

"The present system should be abolished, as the place of students is in the schools. I agree that all students should work in industry to understand what it is all about, but they can do so during their long summer holidays" - Teacher of Greek.

5.5 The ambivalence of teachers over the I.T.P. was also

illustrated by their responses to the question on how useful they considered the training students receive on the job site would be for the students' future career. Quite a big proportion of teachers, (39.7%), stated that the experience would be "very useful" or "useful", 20.1% said that it would be " little useful" or " not at all useful" and 37% were undecided (V38). It is worth noting that these responses are markedly different from the findings of a similar question addressed to students. In that case the responses showed that 84.4% of students considered that their work experience would be useful for their future career.

Some of the comments made by teachers in relation to the subject are the following:

" Work experience would have been useful if it were properly planned and executed" - Instructor of plumbing.

" Most students simply carry out donkey work" - Instructor of welding.

Some typical favourable remarks were the following:

" It helps students in the transition from school to work" - Assistant headmaster, teacher of Greek.

" As a result of the work experience programme, more students eventually follow the trade for which they were trained" - Instructor of woodwork.

5.6 Finally teachers were requested to express their views on whether the industrial programme should continue the way it is run now (day release system) or whether it should be changed into a block release system. The reader is reminded that, as was explained in previous chapters, the teachers' association has demanded persistently that a block release system should be introduced. The responses showed that the majority of teachers, (64%), were in agreement with OLTEK, as they stated that they would prefer a block release system. The remaining 36% wanted the existing day release system to continue (V40).

5.7 Conclusions

The findings presented in this section show that the majority of teachers hold the view that the training of young craftsmen is basically the responsibility of the state and should not be left to industry. This view stems probably from their belief that training should be considered as an integral part of the educational process, and as such it should be offered by the state. This responsibility, according to the teachers, should not be delegated to the employers, because employers do not have the students' welfare at heart, but their own self-interest. Therefore employers could not be trusted. These views are well illustrated by comments of teachers

to the effect that although employers may have the means to provide proper training, they are only interested in how to boost production. Inevitably these views affect the teachers' attitude towards the I.T.P.

Teachers, however, do not discard the usefulness of I.T.P. altogether. They think that it should be offered to as many students as possible, but not to the detriment of schooling. For them the school programme and school attendance is sacred and should not be curtailed. Therefore, although the I.T.P. is useful it could be run during the summer holidays.

When teachers were requested to choose between day release and block release, predictably they chose block release, because in this way the school programme would continue uninterrupted whilst it lasted, therefore it would be nearer to the model of full-time schooling.

6.0 Curriculum Issues

6.1 In order to explore the teachers' perception of the cooperative programme effectiveness from the point of view of curriculum, teachers were asked to express their views on the following issues (a) appropriateness of syllabus content, (b) quality of books and teaching materials, (c) the effect of the introduction of behavioural objectives on teaching. Teachers were also asked to express their opinion on whether the

cooperative programme curriculum should aim at broad or narrow training.

6.2 On the first issue the question put to the teachers was: "How appropriate do you find the syllabus content in the subjects you teach?" Table 11.5 below shows the breakdown of their responses.

Table 11.5 Appropriateness of curriculum content

	U9 Technical	U10 Vocational	U11 Apprenticeship
1. Very appropriate	2.1%	1.8%	2.9%
2. Appropriate	28.9	15.8	7.1
3. Fairly approp.	55.7	57.0	47.6
4. Inappropriate	9.3	18.4	28.8
5. Very inappropriate	4.1	7.2	13.5

On inspecting the above figures one is struck by the great percentage of teachers (more than half) who considered the content to be "fairly appropriate". One may accept this response at its face value, or one may take it that it is an indication of teacher indifference. Another conclusion that may be deduced is that, of the teachers who were not "neutral" on the issue, the majority considered that the Technical Stream syllabuses were more appropriate than the vocational ones. Even less appropriate were deemed to be the apprenticeship syllabuses. Also, significantly in all three cases, the correlations U1 - U9, U1 - U10 and U1 - U11 showed that technical teachers were more likely

to find the syllabus contents appropriate than "general" teachers.

(V1-V9: chi square 16.17, $r=0.0028$, Kendall's Tau C -0.20 , $r=0.003$: V1-V10: chi square 31.88, $r=0.000$, Kendall's Tau C -0.29 , $r=0.000$: V1-V11: chi square 14.18, $r=0.007$, Kendall's Tau C -0.23 , $r=0.002$)

6.3 On the second issue, teachers were asked to say whether they found the books, teaching materials and equipment they used in the teaching of their subjects, suitable. Again for the purpose of comparison, they were asked to comment on all three streams. Their responses are shown in Table 11.6 below.

Table 11.6 Suitability of books, equipment and teaching materials

	V18 Technical	V19 Vocational	V20 Apprent.
Very suitable	11.8%	8.1%	4.3%
Suitable	31.3] 43.1	24.3] 32.4	17.6] 21.9
Fairly suitable	25.1	28.8	18.1
Unsuitable	16.9] 31.8	19.8] 38.7	24.5] 59.6
Very unsuitable	14.9] 31.8	18.9] 38.7	35.1] 59.6

As the above findings show, teachers seem to be more satisfied with books etc. provided for the technical streams than they are with those provided for the vocational streams. Also, in the same way as with the case of curriculum content, the situation is worst with apprenticeship classes. This conclusion was reinforced during conversations with teachers when it was repeatedly pointed out that the more "academic" the course, the better it seemed to be provided for. When each of the above variables was correlated with V1 (Teacher Type), it was shown that there was no significant relationship between them.

6.4 Another issue related to the curriculum put to teachers was whether the curriculum should aim at broad or narrow training. The specific question was: "Curriculum should provide for broad technical education in a wide range of skills and not narrow specialisation". The responses are shown in Table 11.7.

Table 11.7 The need for broad education.

	V12 Technical	V13 Vocational	V14 Apprent.
1. Strongly agree	33.3%	18.6%	12.3%
2. Agree	43.6] 76.9	39.5] 58.1	21.9] 34.2
3. Uncertain	8.3	5.9	7.5
4. Disagree	10.8] 14.7	26.4] 35.9	39.0] 58.3
5. Strongly disagree	3.9	9.5	19.3

The findings clearly show that teachers believe that the more academic the course, the more it needs to be broad based. In discussing the matter further with them, it was found that many teachers viewed "broad" education as "proper" education. These teachers were of the opinion that vocational education, and even more so apprenticeship, did not merit being "broad" based, because it was not really proper education but merely training.

6.5 Finally teachers were asked how significant they thought the leaving certificate was for employment. Their responses are shown in Table 11.8.

Table 11.8 Significance of leaving certificate for Employment

	U46 Technical	U47 Vocational	U48 Apprent.
1. Very great	15.3%	6.5%	6.5%
2. Great	39.2	33.6	19.4
3. Fair	35.4	38.7	28.9
4. Small	6.2	16.1	23.9
5. Very small	3.8	5.1	21.4
	54.5	40.1	25.9
	10.0	21.2	45.3

The findings show that on the whole teachers think that the leaving certificate is significant for employment purposes. Predictably more teachers regard the technical stream diploma valuable because it opens the doors for employment for many jobs in the formal sector. Again

teachers attach the least value to the apprenticeship diploma.

6.6 Concluding Remarks

The analysis in this section has shown consistently that on all issues about which they were asked, teachers had a lower opinion of the cooperative programme curricula than they had of the technical streams which do not include cooperative programmes. Thus the content of cooperative programmes was considered to be less appropriate, and their books and materials were deemed to be less suitable. Also fewer teachers considered that cooperative programmes should be broad based because, obviously, they thought of these programmes as aiming at mere training. Finally even for employment purposes the cooperative programmes leaving certificate was considered to be of less significance than that of the technical streams.

It needs also to be noted that (a) of the two cooperative programmes, the vocational programme scored consistently higher than apprenticeship, and (b) "technical" teachers tend to view cooperative programmes with more sympathy than "general" teachers.

Of course there may be genuine objective reasons why teachers think that the syllabuses are inappropriate or the books etc. are unsuitable. However, if one allows

for such reasons, there seems to be a consistent pattern in the responses which supports the hypothesis that the closer a programme is affiliated to industry, the less teachers seem to like it.

7.0 COOPERATIVE STUDENTS

7.1 The teachers' perception of the cooperative students was investigated by asking teachers to express their views on the students' academic ability, conscientiousness, and behaviour.

7.2 In order to gauge the teachers' perception of cooperative students' academic abilities, teachers were asked to comment on the students' chances for academic advancement to an institution of higher education (8). The issue was raised because Cypriot society in general, and teachers in particular, believe that it is a sound criterion for judging both courses and students (9). For the purpose of comparison, teachers were again requested to express their views on all three programmes run in the technical school, i.e. technical, vocational, and apprenticeship.

First, for technical streams, responses showed that teachers were rather ambivalent. Most of them, 46.4%, stated that the chances of technical students for educational advancement were "very good" or "good". A sizeable proportion (31.6%) thought their chances were

"moderate", a smaller proportion (20.1%) thought they were "few", and a small minority (1.9%) thought that the chances were "non-existent" (V15). Correlation V1-V15 showed that there was no significant relationship between type of teacher and teacher perception on the technical students' chances for advancement.

The responses for the vocational students showed that teachers thought that the chances of these students for advancement were far fewer than those of technical students ("very good" and "good" 0.8%, "moderate" 48.4%, "few" and "non-existent" 31.6%) (V16).

Finally, apprenticeship students predictably were considered to have even fewer chances, ("Very good" and "good" 1.5%, "moderate" 4.6%, "few" and "non-existent" 78.9%) (V17). In both this question and the previous one, there was a coincidence of views between the two types of teachers. (Table 11.9)

Table 11.9 Students' chances for educational advancement.

	V15	V16	V17
	Technical	Vocational	Apprent.
1. Very good	15.8%	8.0%	0.5%
2. Good	30.6	12.0	1.5%
3. Moderate	31.6	48.4	4.6
4. Few	20.1	31.6	14.4
5. Non-existent	1.9	0.0	78.9
	46.4%	20.0%	93.3%

When teachers were asked to make further comments on the

subject, they invariably stressed that students in both the vocational programmes and the apprenticeship classes were academically very weak. Some teachers added that it was ridiculous even to consider the subject. In their comments one could detect that there was a strong element of resentment against this state of affairs. As a school headmaster with mechanical engineering background said, it was a very sad situation because technical schools should have been the natural breeding ground for future scientist-engineers. As things are now, he added, a youth who intends to pursue higher studies, even in engineering, would be better off going to a lyceum.

7.3 As indicated above, teachers were requested to express their views on students' conscientiousness at school. The question teachers were asked was the following: "Compared to the rest of the students, how conscientiously do the students of the cooperative programmes work?" The comparison "to the rest of the students" was deliberately vague, so that it would allow teachers to compare the cooperative students, in a general way, with any other students they might have taught. Technical teachers, of course, would normally compare cooperative students with those of the technical streams. General teachers, on the other hand, would compare them with any students they might have taught, including those in the gymnasia. This wider comparison

was considered to yield more meaningful results.

The responses showed that the great majority of teachers (79.5%) believe that the vocational students worked less conscientiously than the rest of the students. Only 5.1% of the teachers expressed the view that the vocational students were more conscientious, whilst the remaining 15.4% thought they were equally conscientious (V29). The correlation $V1 - V29$ showed that of the two types of teachers, general teachers are likely to think that vocational students are less conscientious (chi square 16.215, $p=0.0027$, Tau C 0.250 and $p=0.0001$)

Oddly enough, teachers had a slightly better opinion of apprentices. Thus a slightly reduced majority, (74.1%), considered apprentices to be less conscientious, and a correspondingly higher proportion, (10.4%), thought apprentices were more conscientious. About the same proportion, (15.5%), again expressed the opinion that they were equally conscientious (V30). Findings of course show that a number of teachers think that, although apprentices have low academic abilities, they are conscientious. Finally, the statistical analysis showed again that technical teachers are likely to think that apprentices are more conscientious (chi square 26.22, $p=0.000$, Kendall's Tau C 0.347 and $p=0.000$).

Some typical comments from teachers on the issue were

"The cooperative students do not know where they belong. It is natural that they are influenced by the ways of other workers in industry. This often means that these students get interested in making money, and they lose interest in school work" - Assistant Headmaster with background in English.

"I often have the impression that these students come to school to have a rest, after working hard in industry" - Instructor in workshop engineering.

"They are completely disinterested in lessons, especially in the general subjects, because they probably think they are no use to them" - Assistant Headmaster with background in Greek.

"They have no motivation. Whatever they do, they eventually get their piece of paper" - Instructor in electrical engineering.

7.4 Finally, the other aim in this section was to gauge how teachers perceived the cooperative students' behaviour. In order to achieve this aim teachers were requested to express their views (a) on school uniform, (b) school discipline in general and (c) on the cooperative students' behaviour in particular. The two first questions were obviously meant to investigate the general attitude of teachers towards discipline.

7.4.1 On the subject of uniform teachers' views were quite conservative. The great majority (75.4%) stated

that all students, including apprentices, should wear uniform at school. Far fewer teachers (8.0%) thought that apprentices should not be made to wear uniform, but all the other students should, whilst a small proportion (1.8%) expressed the opinion that, in addition to the apprentices, the sixth vocational students should be exempted. Finally the liberal section who believed that uniform should be abolished was represented by a relatively small minority of 13.8% (V32).

Statistical analysis showed that there was no significant relationship between the views of the two groups of teachers (general and technical) on the issue of uniform.

7.4.2 Responses showed that the great majority of teachers think that discipline in the technical schools is neither too strict nor too lax, but about right. Thus 67.9% of the teachers considered that discipline was "appropriate", 10.0% thought it was too strict and 22.1% expressed the view that it was too lax (V31).

Again there was no significant relationship between the views of the two groups on the subject.

6.4.3 Having established that the majority of teachers believe that discipline in the schools was "appropriate", it was interesting to examine how they compared the behaviour of cooperative students with the behaviour of the rest of the students.

The responses showed that teachers considered that the behaviour of cooperative students was far worse. First as regards the sixth vocational students, a small proportion of teachers (3.2%) expressed the view that these students behave better than the rest, 20% thought that they behaved the same, and the big majority (76.8%) stated that the sixth vocational students' behaviour was worse than that of the rest of the students (U27).

The picture presented by the teachers' responses, as regards the apprentices' behaviour, was very similar to the one above. Thus 3.8% thought that apprentices behave better, 18.4% the same, and 77.8% expressed the view that apprentices behave worse than other students (U28)

7.5 CONCLUSIONS

The findings in this section have shown that teachers consider cooperative students to be academically weak and less conscientious than the rest of the students. It was also found that although the majority of teachers think that discipline in the technical schools is "appropriate", by far the greatest proportion hold the view that the behaviour of cooperative students is worse than that of the rest of the students. It is also worth noting that judging by their responses on the issue of uniform, the great majority of teachers are

conservative.

8.0 Relation with Industry.

8.1 Since one of the main aims of technical and vocational schools is to train young people to work in industry, it is generally acknowledged that these schools should cultivate and maintain close links with industry. The teachers' attitude towards the role of industry in technical education is naturally crucial on the matter. The teachers' views were thus explored on the following issues: (a) whether there is sufficient dialogue between technical schools and industry, (b) whether employers should take a more active part in the development of curricula for the technical schools, and (c) whether employers should take an active part in the evaluation of technical education. Their responses were as follows:

8.2 On the question of whether there is sufficient dialogue between schools and industry, just over half the teachers refused to commit themselves. Thus 50.7% stated that they were "uncertain", with 16.1% agreeing and 33.2% disagreeing that there is sufficient dialogue with industry (V41).

Predictably a greater proportion of general teachers (58%) stated that they were "uncertain", compared to 45% of the technical teachers. Even among the technical

teachers, however, the proportion of those who were "uncertain" is considered extremely high and shows a high degree of ambivalence on the subject.

It is interesting to note that of those who answered, technical teachers were more likely to consider that there is insufficient dialogue with industry (Correlation $V1 - V41$, chi square 22.19, $p = 0.0002$, Kendall's Tau C 0.312 and $p = 0.000$)

Some typical comments in support of more dialogue with industry were the following:

" More dialogue is necessary because it is important for employer to know what we are doing. In this way they will offer their own suggestions, so together we shall be able to develop better curricula" - Instructor of building.

" Dialogue will not only help us understand what industry needs, but will also help the employers understand our problems" - Assistant Headmaster.

" Dialogue is important because employers have more experience than we have" - Instructor of carpentry.

" I think there should be more dialogue. The problem is

that employers are either too busy, or do not care, for they never seem to be in a position to provide any constructive suggestions" - Mechanical Engineering Instructor.

Some of the comments against the promotion of more dialogue were the following:

" I am against the so called "dialogue". In these schools we should offer education, not training. If employers have a greater say in what is taught in the schools - because this is what is going to happen if we have more dialogue - we shall end up in training our students, not educating them" _ Headmaster with Physics background.

" I disagree with having greater dialogue with industry as this is dangerous both for education and the industry itself. This is because industry does not know what is good for them. They are greedy and offer myopic short term solutions to their problems" - Mechanical Engineering Instructor.

8.3 On the question whether employers should take a more active part in the development of curricula for the technical schools, teachers were asked to give two responses. One was on the involvement of employers in the curriculum of "their own subject" and the other was "generally in technical education". The responses are

shown in Table 11.10

Table 11.10 Involvement of Employers in Curriculum Development.

	In my subject(V42)	Generally(V43)
1. Strongly agree	17.7%]	19.6%]
2. Agree	35.9] 53.6%	43.1] 62.7%
3. Uncertain	14.8	14.7
4. Disagree	20.6]	16.2]
5. Strongly disagree	11.0] 31.6%	6.4] 22.6%

The correlation $V1 - V42$ showed that the general teachers were much more likely to be reluctant than the technical teachers to have industry involved in the development of the curriculum of their own subject (chi square 22.189, $p=0.0002$, Kendall's Tau C 0.312 and $p=0.000$).

The usual comment the general teachers made on the issue was that people from industry were in no position to offer constructive suggestions as to the content or teaching methods of subjects like Mathematics, Science and Language.

The correlation $V1 - V43$, however, showed that there was no significant relationship between the two variables. On further inspection it was established that the distribution of responses to $V43$ was about the same for general and technical teachers. Further investigation showed that some teachers who were not prepared to see the industry getting involved in their own subject,

seemed to agree that industry should take a more active part "generally" in technical education curricula. Some teachers, however, thought that any cooperation between schools and industry should proceed with caution because the needs of industry may run counter to the needs of the individual.

8.4 As indicated above, teachers were also asked whether employers should take an active part in the evaluation of technical education. This obviously is an issue that implies exercise of some degree of control on schools by industry. It needs to be noted here that according to the Education Law, the only authority which has jurisdiction for evaluation and control of technical schools is the Minister of Education, through the headmasters and the inspectors. This right has always been jealously guarded, both by the Ministry of Education and educators who frown on any "outside interference". In the light of this tradition, the responses showed that teachers are quite open-minded on the subject. The responses are shown in the table below:

Table 11.11 Involvement of Employers in Evaluation.

	In my subject(U44)	Generally(U45)
1. Strongly agree	12.0%	10.4%
2. Agree	32.2] 44.2%	37.6] 48.0%
3. Uncertain	17.3	20.8
4. Disagree	24.0]	20.3]
5. Strongly disagree	14.4] 38.4%	10.9] 31.2%

Statistical analysis showed that there was a strong significant relationship in correlation U1 - U44 (chi square 25.53, $p=0.0000$, Kendall's Tau C 0.357 and $p=0.0000$). It was also found that there was no significant relationship in correlation U1 - U45.

In their comments many teachers suggested there should be standing committees, with wide representation, which would include employers, trade unions, teachers and government representatives, which would serve as advisory bodies on the curricula. They further pointed out that although there were on occasion such committees in the past, these committees served merely as rubber stamps. A number of teachers were again very sceptical about the participation of employers in any committee. They suggested that industry should be represented, instead, by specially selected industry employers of proved ability and good will. An assistant headmaster, speaking on the subject, warned that it would be a great mistake to assume that the employers' views should be treated as those representative of the community. "Employers and community are not synonymous" he stressed. Finally the headmaster of a school remarked that it would be unwise to tie any school curriculum too closely to employment needs.

8.5 Conclusions

In this section it was shown that as many as 50% of teachers are "uncertain" on whether there is sufficient dialogue between school and industry. This high incidence of uncertainty may be due either to ignorance on their part of the degree of dialogue there is, or to the teachers' ambivalence on whether the dialogue should be increased or not.

The following question, on the employers' involvement in the development of curricula, helped clarify the above point. As only about 15% of teachers were "uncertain" on this issue, there is the implication that much of their uncertainty on the previous question was due to their ignorance of the degree of dialogue carried out, rather than their ambivalence over its advisability.

The findings have also shown that teachers are more reluctant to accept an employers' role in evaluating than in curriculum planning. However, in view of the local tradition of "closed - school" policies, the fact that only about 30% of teachers expressed definite disagreement with employer participation in technical education evaluation, should be seen as encouraging.

9.0 Schools Vs Industry for Training.

9.1 In order to investigate the teachers' perception on whether school or industry is better suited to provide training, their views were sought on the following two questions:

- (a) Are workshop skills better learnt at school or in industry?
- (b) Are technological subjects better learnt at school or in industry?

The responses are given below:

9.2 The first statement to which teachers were requested to respond was the following: "Workshop skills are better learnt at school than in industry". For reasons of comparison they were asked to express their views for all three streams run in the technical schools, technical, vocational, and apprenticeship. The responses were as shown in the following table.

Table 11.12 Workshop skills better taught at school.

	V21	V22	V23
	Technical	Vocational	Apprent.
1. Strongly agree	17.8%	17.2%	17.0%
2. Agree	46.5] 64.3%	42.6] 59.8%	28.0] 45.0%
3. Uncertain	19.5	21.6	23.6
4. Disagree	14.6]	16.7]	24.2]
5. Strongly disagree	1.6] 16.2%	2.0] 18.7%	7.1] 31.3%

Inspection of the figures above shows the following:

(a) For all three programmes the greatest proportion of teachers believe that skills are better taught in school rather than in industry.

(b) The teachers' perception of where skills should be taught varies according to the stream. Thus, as regards those who expressed their preference that the skills should be taught at school, the technical streams came first with 64.3%, the vocational second with 59.8% and third, a long way behind was apprenticeship with 45%.

(c) The teachers who disagreed with the statement, that is those who preferred skills to be taught in industry, were only about half of those who were in agreement.

Some typical comments of those in agreement with the statement were the following:

" At school students are taught the skills, in industry they have to pick them up" - Instructor of building.

" At school pupils are taught the orthodox way of doing things. In industry very often they use unorthodox methods which may be productive but quite unsuitable for a beginner" - Instructor of plumbing.

A matter of concern voiced by many teachers was as to whether foremen in industry have adequate educational background which would enable them to fulfil their training and teaching function.

Some of the opposing views, on the other hand, were the following:

" In order to be able to teach a skill, the teacher must be skilful himself. I think many of our instructors do not possess the skills, so how can they teach them? Students are better off, therefore, in industry where at least the craftsmen know what they are doing" - Instructor in Mech. Engineering.

" Skills are better taught in industry simply because a skill cannot be acquired in a few periods at school, but with practice and experience which can only be offered in industry"-Instructor in Woodworking.

9.3 A similar statement to the previous one was the following: " Technological subjects (technology and technical drawing) are better taught at school". In this case there was no doubt that apart from a few exceptions teachers agreed with the statement. The responses were as follows.

Table 11.13 Technological Subjects better taught at school.

	U24	U25	U26
	Technical	Vocational	Apprent.
1. Strongly agree	58.4%	54.7%	54.7%
2. Agree	36.0%] 94.4%	38.8%] 93.5%	33.7%] 88.4%
3. Uncertain	4.6	5.6	5.8
4. Disagree	0.5]	0.9]	5.8]
5. Strongly disagree	0.5] 1.0%	0.0] 0.9%	0.0] 5.8%

All comments made by teachers on the subject were to the effect that conditions in industry are such that it would be quite impossible to teach students technical or trade theory.

9.4 Conclusion

The findings in this section show that practically all teachers believe that technological subjects are better taught at school rather than in industry. Also, even in the case of workshop skills, only a small proportion of teachers have expressed the view that skills are better taught in industry. The findings therefore indicate that teachers are of the opinion that schools are better suited to offer training than industry.

10.0 General Conclusions

The aim of this chapter was to explore the teachers' attitude to the industrial training programme. In the course of the chapter the following were established:

(a) Although teachers are on the whole satisfied with the effectiveness of technical schools, they believe that the presence of cooperative students in the schools affects adversely their effectiveness.

(b) The cooperative classes are the least popular classes for teachers to teach. This is probably because teachers consider the cooperative students to be

academically more weak, less conscientious and worse disciplined than the rest of the students. Other reasons why teachers are reluctant to teach cooperative classes are that they think that the syllabus content of cooperative courses is inappropriate and the books and teaching materials unsuitable.

(c) Although teachers believe that (i) it is the responsibility of the State to train young craftsmen, and (ii) that young people should be taught their trade in institutions rather than in industry, they would be happier if such training was offered in special training centres and not in schools.

(d) Although most teachers would welcome closer cooperation between schools and industry, some very strong reservations were expressed as to the nature of such cooperation. There is, thus, a sizeable proportion of teachers (about one third) who would strongly object to employers' gaining a position of control over schools.

The above findings point to the conclusion that teachers, although they may not be antipathetic to the Industrial Training Programme itself, resent the fact that it has been incorporated in the technical school curriculum.

NOTES AND REFERENCES

1. The researcher is aware that teachers of technical subjects may be classified into two groups, those who teach technical or vocational theory and those who teach practical or workshop subjects. In Cyprus however the practice has been for technical teachers to teach both theory and workshop. Even in the law there is no distinction between the two groups, as all teachers of technical subjects are referred to as "Ekipedevtes" (instructors). The teachers of general subjects, on the other hand, are described as "Kathegetes" (professors).

2. The small difference in the proportion - they should have been 98 general and 145 technical - was due to the fact that the numbers of teachers of various specialisations on the staff lists were sometimes odd and sometimes even.

3. These are older teachers who were appointed before legislation requiring industrial experience was introduced.

4. These again are probably older teachers who were appointed before the introduction of the law which required all teachers to go through a course of teacher training.

5. They are specified by the Education Law 10/69. The teachers' salary scales vary, of course, according to their grade which depends on their paper qualifications.

6. In both V68 and V69 there were considerable numbers of omissions (26 and 51 respectively, out of 222). The reason is that some teachers have no experience of teaching either 6th vocational or apprenticeship classes, so they were in no position to answer.

7. L.E.M. _ Lyceun of elective subjects _ This is a comprehensive system of education which was introduced in Cyprus about five years ago.

8. The reader is reminded that this was the second question on students' educational advancement. The previous one was intended to explore the teachers' views of the technical schools' public image of effectiveness.

9. This is indicated by the repeated declaration from the department of technical education that technical school courses do not, in any way, diminish the chances of students for educational advancement. A statement to this effect was included in the policy statement on education made by the Minister of Education in the House of Representatives in 1980.

CHAPTER TWELVE

EMPLOYERS' PERCEPTIONS OF THE I.T.P.

1. Introduction

There seems to be a widespread general assumption that relations between educationalists and employers are characterized by mutual mistrust. The assumption stems from the fact that some teachers in the past accused employers that they are interested only in profits and that they resist technical education because they fear that it would lead to the disclosure of their trade secrets. Also, there has been reciprocal criticism by employers against the technical schools that they produce people who are quite unfit for work. These employers, in statements from time to time, made it clear that they did not have much faith in the value of "book-learning", which they said misled the young workers and gave them an exaggerated sense of their merit.

There are those, of course, who do not share the above views. They believe that these assumptions are relics of the past and are not valid today. These people hold the opinion that there is a growing awareness that cooperation between schools and industry is essential to

provide education which is both useful and worthwhile. Advocates of cooperative education are naturally in the forefront of the latter school of thought, as cooperative education, by its very nature, represents the most concrete manifestation of the improved relations between schools and industry.

The above assumptions, as regards the teachers' views, were examined in the previous chapter. The aim of this chapter is to explore the employers' perceptions by presenting the findings of a survey carried out among employers who had first hand experience of the I.T. Programmes.

The target population of the survey was the owners, or their representatives, of 610 establishments all over Cyprus, who during 1984 - 1985 employed I.T.P. students. Of these, a stratified random sample was selected to represent establishments of varied specialisation and geographic region. It was also decided that the sample would be about one quarter of the total population, that is 150 establishments.

As the above establishments were scattered all over the island, the researcher considered that, however desirable, it would have been extremely difficult for him to visit all establishments personally. Another alternative, to mail the questionnaires, was also

rejected because of the notoriously low return rate of mailed questionnaires addressed to industrialists. Because of the above difficulties, the researcher decided on the following compromise solution; he personally visited 50 establishments, and for the remainder, he requested a number of his colleagues to help him by undertaking to administer, on his behalf, a few questionnaires each. Their response was most gratifying. Thus, eventually, out of the 150 questionnaires 120 were completed and returned.

The questionnaires aimed at obtaining the employers' perceptions on key topics pertaining to (a) the best way of training young craftsmen, and (b) how satisfied they were with students, the schools and the curriculum. Each employer was interviewed individually. Therefore it was possible to ask employers to expound further on the answers they gave in the questionnaire.

In the remainder of this chapter the findings of the survey will be presented and discussed.

2. Training Policy Issues.

2.1 The issues that have been selected for inclusion in this section are the following:

(a) Is the training of new craftsmen the responsibility of the state or of industry?(U3).

(b) How do employers rank the available ways of training young craftsmen in terms of serving the needs of their firm?(U2).

(c) Should the number of days I.T.P. students attend school be increased? (U5)

(d) Does the absence from work of apprentices during the days they are at school create problems for them? (U7)

The responses of the employers were as follows.

2.2 The majority of employers (72.5%) agreed that the training of young craftsmen is the responsibility of the state. Only 20.8% expressed disagreement, implying that they believed that the responsibility lay with industry rather than the state, 7.5% were undecided. (U3)

The above question gave rise to a wide discussion with employers during the interviews. Many employers, for example, underlined the interdependence of state and industry in matters pertaining to vocational training and stressed that the latter needs to become increasingly concerned with the role of schools. Some employers however warned that the state should not assume too much responsibility for vocational training, "if only because industry knows best what industry needs".

The view of the Employers' Association, as expressed by

one of its officers, was that "it was self-evident that training should be carried out jointly by industry and schools". Thus, as the officer explained, although institutional training is becoming increasingly important, it should not be forgotten that such training would be ineffective if it is not backed by industrial experience. Therefore, he added, since industrial concerns in the island are usually too small to run institutional training schemes of their own, the best solution is for the State to provide institutional training and the industry to supplement this training by providing industrial work experience programmes.

Of course, not all employers agreed with the above views. There were, thus, those who felt that the state "intervention" to train staff did more harm than good. According to these employers, the nature of technical schools in the island was such that, not only were they inefficient as a means of training for work skills, but were in effect counter-productive because "they put wrong ideas in the pupils' heads". On these grounds, these employers argued, there is good reason to favour vocational education policies which would minimize the amount of secondary vocational education offered by the Ministry of Education, and shift more responsibility onto employers.

In spite of the above comments, however, it needs to be

stressed that most employers did not adopt a dogmatic attitude on the subject. Thus, although they expressed the view that the State is ultimately responsible for training, they also thought that industry should help in this effort. In this respect many employers admitted that there was a need for tightening-up and defining better industry's role in the training of young workers.

2.3 In order to elicit further the employers' views as to the programmes that would best serve their firm's interests in the training of young craftsmen, they were presented with a list of currently available programmes, and they were asked to rank them in order of preference (1 - 5). The programmes were the following.

Programmes.

Option A: Employ young graduates of the first cycle at the age of 15, after they had completed the first cycle of general education and train them in the firm.

Option B: Employ graduates of the Technical Stream of the Technical School.

Option C: Cooperate with the Technical Schools in the training of students through the I.T.P. for apprentices.

Option D: Cooperate with the Technical Schools in the training of students through the I.T.P. for vocational

students.

Option E: Employ graduates of the Lyceum, who after receiving general education up to the age of 18, go through an accelerated training course at the productivity centre.

The responses showing the employers' rank order of preference for the various programme options are shown in the table below.

Table 12.1 Employers' Training Programme Preference (U2)

	RANK ORDER OF PREFERENCE					
	1	2	3	4	5	TOTAL
A	31	19	11	31	28	120
B	21	29	30	33	7	120
PROG. C	25	33	48	8	6	120
D	40	36	20	24	0	120
E	3	3	11	24	79	120
TOTAL	120	120	120	120	120	

The method used to determine the programmes most preferred was that of rank order ratings. These were calculated as follows: for each programme, the first option was allocated one point, the second option was allocated two points and so on. On this basis the

ratings for programme A were as follows:

$$(1 \times 31) + (2 \times 19) + (3 \times 11) + (4 \times 31) + (5 \times 28) = 366 \text{ points}$$

Similarly programme B had 336 points, programme C had 297 points, programme D had 268 points and programme E 503 points.

The above exercise is very revealing as to the feelings of employers towards the I.T. programmes. Of the five available options they were asked to consider, the two options which incorporated I.T. programmes were the most preferred. The findings leave, therefore, no doubt as to the employers' appreciation of cooperative programmes as a form of training young craftsmen.

When employers were asked to explain the reasons for their expressed preference, some employers were very cynical. They said that they would have preferred to train their own craftsmen. However, they found it impossible to recruit fifteen year olds who would be able and willing to be taught the trade, as all able young people wanted to go to school up to the age of eighteen. According to them, therefore, the I.T. Programmes were useful because they attracted young people into the trades. As one employer suggested, I.T. programmes were popular because they provided a compromise solution acceptable to all parties. They satisfied on the one hand the wish of students to stay on at school until they were 18, and on the other hand

they afforded the opportunity to industry to generate its own skilled employees.

The quality of labour that the industry needs was also discussed with a number of employers. During these discussions it was found that almost all employers think that production methods in the industry are such that good all round craftsmen are needed. It was also acknowledged that the value of the work the individual can perform is affected by his educational background. It was pointed out, however, that for most jobs the general education received by the age of fifteen is sufficient. Finally, some employers complained that schooling after the age of fifteen, especially if it is divorced from the world of work, is counter productive for the needs of the craftsmen, because it creates wrong "white collar" attitudes. This view explains, of course, why so few employers expressed preference for technical students (2) and graduates of the Lyceum.

2.4 The other two issues on which employers were requested to express their views in this section were; (a) whether the number of days that students attend school should be increased (U5), and (b) whether the absence of students from work during the days they are at school creates problems for the firm (U7).

The above two questions sought to investigate whether

employers feel frustrated by possible upsets in the planning of their work because of the absence of their young workers. This issue is particularly important in small firms, which employ the great majority of students, because the trainee students usually work as assistants side by side with experienced craftsmen.

On the question of whether the number of days students attend school should be changed, employers were asked to express their views separately for sixth vocational and for apprenticeship. The reason for doing this was because vocational students are at school for three days a week, whilst apprentices are away for one or two days. Their responses were as follows.

	Voc.	Appr.
1. The number of days that students attend school should be increased	17.5%	13.3%
2. The number of days that students attend school should stay the same	57.5%	71.7%
3. The number of days that students attend school should be decreased	19.2%	2.5%

The kind of problems that might be created by the interruption of work because students go to school were considered to be basically the same, irrespective of the number of days students were away. So employers were requested to express their views on the effect of the absence of trainees as a whole. The responses were as

follows.

1. Great problems are created	8.3%
2. Quite a lot of problems	14.2%
3. Moderate problems	31.7%
4. A few problems	35.8%
5. No problems	10.8%

Inspection of the above shows that employers are generally satisfied with the amount of time students spend at school. The findings also show that a view often expressed by some employers, that the absence of trainees during working time upsets the industry, is not representative of the feelings of the majority of employers.

2.5 Conclusions

The main conclusion of this section is that employers are generally satisfied with the I.T. Programmes. It seems that on the whole sending their trainees to school for one or more days per week does not seriously inconvenience them. In this respect it is significant to note that a number of employers do not believe that technical school programmes contribute much towards training. They think however that schools play an important role in attracting better students to the trade.

Predictably, therefore, the findings have indicated that employers would rather help train students in cooperation with the technical schools at an early age, rather than employ students after they had completed their secondary school education at the age of 18. This is presumably because employers are of the opinion that by the age of 18 students are too set in their ways, mainly because they develop a white collar attitude, to be interested in skill training programmes. For this student mentality, employers blame the educational system.

Thus, although the majority of employers believe that the training of young craftsmen is basically the responsibility of the state, they are willing to help in this function by cooperating with the technical schools.

3 Employer Satisfaction with Students' Job Performance

The assessment of employer satisfaction with vocational education is appealing. It seems logical that at least one test of vocational education's effectiveness is the extent to which vocational education products are satisfactory or unsatisfactory in the eyes of the employer. According to S.J. Franchak "job performance"

is a very complex construct and is not considered to be one concept or trait, but rather a cluster of dimensions. These dimensions have been labelled in various ways, such as level of skills, quality of work, quantity of work, technical knowledge, attendance, punctuality, ability to work independently, cooperation with co-workers and superiors, communication, skills and problem-solving skills.(3) Using this model, a question was constructed to gauge the above determinants. The question, and the employers' responses, expressed as a percentage, were as follows.

Table 12.2 Job Performance Satisfaction (U8)

Please rate on a scale of 1 - 5 (one the lowest, five the highest) the general standard of your I.T.P. students in the following fields.

	1	2	3	4	5
1. Basic skills (literary etc)	2%	24%	52%	18%	4%
2. Job skills		20	56	22	2
3. Technical knowledge	2	25	42	26	5
4. Productivity	3	53	21	23	0
5. Ability to work without constant supervision	18	35	32	11	4
6. Willingness	0	0	19	42	39
7. Punctuality			5	32	63
8. Cooperation with co-workers			20	42	38

Inspection of the above table shows that students score much more highly in attributes of the effective domain, that is in willingness, punctuality and cooperation with their co-workers. These attitudes seemed to be highly appreciated by employers. A typical remark from one

employer was the following: "These young lads are my most willing workers". Many employers also highly praised students for their punctuality and good manners. Employers attributed these qualities to the school influence. A typical remark was "students are easier to handle because they are accountable to the school".

The picture presented on the abilities of students in the cognitive and psychomotor fields was less attractive. Perhaps, understandably, employers gave the lowest ratings to the students' productivity and ability to work without constant supervision. In this respect, it may be said that many employers' expectations of the students' abilities to produce, seemed to be unrealistically high. It needs also to be noted that employers generally blamed the schools for not preparing students in such a way as to make them more productive.

In discussing the quality of I.T.P. students with employers, it emerged that many of them developed a more pragmatic attitude towards the problem than they did for matters over productivity. They seemed thus to be aware and accept that, with the prevailing social conditions in the island, it would be unrealistic to expect that students with high intellectual abilities would become craftsmen. On the other hand some of the old timers, who started as trainees and who were obviously extremely

capable but had had no formal education, seemed to regret the present state of affairs. A typical comment was the following: "When we were young it was only the most intelligent young men that became craftsmen. Nowadays we have to be content with mediocrity". Another one said "It is a shame that now the intelligent young people get white collar jobs which are dull, uninteresting and do not require much brain, whilst in the trades which require more intelligence, we get the less able students".

In order to challenge the above, the researcher raised the question that perhaps work in industry is nowadays more "repetitive", so that it is less intellectually demanding. In answering this point most employers were adamant that industry in Cyprus has not become so repetitive as to manage with narrowly skilled operators. They stressed that there was a need for intelligent versatile craftsmen.

In conclusion it may be said that the employers' perception of the students' job performance was that it was fair. They were not enthusiastic about the performance of students in basic and trade skills, but they seemed to accept this as inevitable because of the quality of students. On the positive side, most employers were quite pleased with the attitude of the youngsters towards work.

4. Availability of Workers

Related to the above, is the issue on whether employers can find enough skilled workers for the needs of their industry. The following question was put to them.

"Do you have any problems in finding workers?" (U10)

For reasons of comparison employers were requested to give two answers, one for young trainees and the other for experienced craftsmen. The response were as follows.

	Trainees	Craftsmen
1. Many problems	28.3%	30.8%
2. Considerable problems	29.2	19.2
3. Moderate problems	21.7	19.2
4. Few problems	4.2	11.7
5. No problems	13.3	13.3

The above findings show that there is a shortage in the labour market of both young trainees and skilled craftsmen. In fact employers in some industries indicated a sincere concern for the lack of trained young workers to fill future needs. This shortage, of course, has an effect on the quality of young trainees that are recruited for industry, as there is a tendency for all candidates to be recruited without any selection.

Another problem that emerged when the matter was

discussed with employers, was the following: Many employers complained that some firms were not to be troubled with the training of boys and relied on others to provide them with the skilled workers they needed.

3.4 In conclusion it may be said that the findings in this section have shown that unlike the teachers, the employers are not displeased with the quality of the trainees. It was also found that there is a shortage of young trainees which makes selection impossible. There is also a shortage of craftsmen. (4)

5. Technical Schools

In order to explore the employers' perception of Technical Schools, they were requested to answer questions which centred around the following issues

(a) the quality and relevance of the training offered at the schools (U17).

(b) the value they attach to the leaving diploma (U14 and U15), and

(c) the general public attitude towards the schools (U20).

In the following paragraphs there will be a presentation of the findings to the above questions together with some relevant discussion.

4.1 On the issue of relevance employers were asked to answer the following question: How relevant do you find the training offered in the technical schools? (U17)

The responses were as follows.

1. Very relevant	14.2%
2. Quite relevant	50.8%
3. Moderately relevant	31.7%
4. Little relevant	3.3%
5. Not at all relevant	0%

In order to explore further the employers' views on the issue, they were also asked to what degree the existence of technical schools has relieved them of the need to train new craftsmen (U4). Their responses were as follows.

1. To a great degree	7.5%
2. To a considerable degree	25.0%
3. To a moderate degree	40.0%
4. To a small degree	21.7%
5. Not at all	5.8%

Finally, employers were asked to characterize the quality of work carried out in the Technical Schools

(U20). Their responses were as follows:

- | | |
|--------------|-------|
| 1. Very high | 6.7% |
| 2. High | 35.8% |
| 3. Fair | 53.3% |
| 4. Low | 2.5% |
| 5. Very low | 1.7% |

The first set of the above findings indicate that employers think that on the subject of relevance technical schools score quite highly. A smaller proportion of employers however feel that technical schools have relieved them of the need to train their own trainees. Thus the second set of findings shows that a number of employers, who feel that training offered in the school is relevant, do not find it suitable or adequate to satisfy their own particular needs. Lastly, the third set of findings show that employers consider the quality of work carried out in the schools as being rather high.

It is obvious therefore that the survey findings show that although employers are certainly not antagonistic towards the schools, they feel ambivalent over the issues on which they were questioned. This ambivalence was reflected in their conversations with the researcher. For example, it was often pointed out by them that while the schools can do much to develop trade skills needed in industry, only industry can build on

this foundation the competence in the particular jobs it wants. As one employer said, it would be highly unusual for a young school graduate, whatever his education or training, to begin work without additional training at the place of work.

5.2 The leaving diploma.

As teachers and parents feel very strongly about the I.T.P.students taking a valid diploma, employers were asked: (a) How much value they attached to the leaving diploma when employing people, (U13), and (b) how important they thought the leaving diploma was for advancement in the world of work (U14). As there are two types of leaving diplomas, one for the vocational section and one for apprenticeship, employers were requested to rate the two diplomas separately.

5.2.1 The first question, thus, put to employers was as follows: "What weight does the leaving diploma of the Technical School carry in your firm for the purpose of initial employment? The responses are shown below:-

	Vocational	Apprenticeship
1. Very great	9.2%	8.3%
2. Great	16.7%	14.2%
3. Moderate	20.8%	14.2%
4. Little	32.5%	40.0%
5. None	15.0%	14.2%

5.2.2 The second question put to employers was the following. "How important do you think the Leaving Diploma is for Vocational Advancement?" The responses were as follows.

	Vocational	Apprenticeship
1. Very important	19.2%	15.0%
2. Quite important	28.3%	18.3%
3. Moderately important	23.3%	26.7%
4. Little important	17.5%	19.2%
5. Not at all important	9.2%	9.2%

5.2.3 The responses to the first question show that employers do not on the whole consider the leaving diploma as very important for initial employment. As most employers indicated, their main concern is not whether a young worker has his piece of paper or not, but whether he is productive. As they explained, the normal practice among employers is to employ a young worker on a trial basis for a week. Then according to his performance, they would decide whether to keep him on. Also, up to a certain degree, the remuneration of workers depends on their productivity. More significant was that in their comments employers were unanimous that they do not pay young workers more, just because they

are graduates of a school.

When asked on the young workers' chances for vocational advancement, however, many employers were more ready to accept that the technical school graduates are at an advantage. This opinion is also reflected in the responses to the second question (par.4.2.2). Thus it seems that although employers do not regard very highly the leaving diploma for the purpose of initial employment, presumably because the young graduates are not very productive, they realize that the education these graduates receive at school will help them in the future.

Finally, predictably, inspection of the responses to the two questions indicates that employers rate the vocational diploma higher than the apprenticeship diploma.

6.0 Curriculum

6.1 The exploration of employers' opinions on curriculum was made with the awareness that the views of the role of employers in designing technical education curricula are conflicting. Firstly, there is the widespread view that employers do not only have the right, but also the obligation to participate in the formulation of the curriculum for vocational education. This view however

is not unchallenged. As Dino Carelli points out, the assumption that the employer is the most competent person to identify appropriate qualification is weakened because (a) employers do not share common interpretation of what is required, and (b) employers use different criteria in their theoretical statement of requirements and in the actual process of selecting individual candidates.(5)

Of course the above is expressed with caution, and in no way implies that the researcher adopts the view that the employers' views should be ignored. For, as S.J.Franchak points out, "gathering employer opinion can be an effective means of setting priorities for programme improvement" (6).The views on the role of employers in curriculum development for vocational education are therefore conflicting. (7)

Despite the differences as to the legitimacy of the employers' role in the planning of vocational programmes, the researcher decided that it would be useful to seek their opinions. Thus in the questionnaire, employers were asked to express their views on the following issues related to the technical school curriculum.

(a) Should technical schools aim at providing a wide range of skills covering many allied trades, or a

narrower specialisation mainly in one trade? (U16)

(b) What changes should be made in the programme of the schools concerning the number of periods the various subjects are taught?(U18)

(c) To which degree do you think employers influence the curriculum in the technical schools? (U19).

The findings to the above questions are given below. Before proceeding with the discussion of the findings, however, it would be interesting to note that during the interviews it was discovered that very few employers were familiar with the contents of the curriculum taught at the technical schools. Very few even knew of the range of subjects that are taught in the schools. Nevertheless, their ignorance did not seem to inhibit them in any way from expressing very definite views on what ought to be taught in the schools.

5.2 On the first question, the majority of employers (68.6%) replied that schools should aim at teaching a wide range of skills covering many allied trades. The remaining 31.4%, on the other hand, were of the opinion that it would be better if schools confined themselves to teaching more specialised skills, mainly in one trade (U16).

In interpreting the above findings, it needs to be taken

into consideration that it is only quite recently that industry in Cyprus moved from home or from very small workshops to bigger workshops and factories. Traditionally the craftsman in Cyprus, like all pre-industrial workers, has not been a narrow specialist, but possessed wider skills. He was trained to begin and complete the work on making any item, a water-pump, a piece of furniture, and so on. Naturally, with industrialisation there grew a diversification of function so that the worker undertook limited tasks. However most of the factory owners in Cyprus are still the products of the older tradition. Typically, during the interviews this type of employer demanded with vigour that, like themselves, the young craftsmen should be competent in many skills.

As the responses show, however, there was an opposite view as well. These were the ones that wanted the technical schools to run programmes of direct vocational education in order to offer the industry "the right man for the right post". This group of employers argued that schools, in planning their curriculum should take account, primarily, of actual conditions in industry.

6.3 In the second question, in which employers were requested to indicate which changes they would like to be made in the technical school programme, their responses were as follows.

(a) 83.3% _ more emphasis should be given to technical subjects and technical skill acquisition.

(b) 7.9% _ more emphasis should be given to the development of basic skills in literacy and numeracy.

(c) 8.8% _ the programme is satisfactory and should not be altered (V18).

It is interesting to note that in answering a similar question in a survey, manufacturers in the United States stated that more emphasis should be given to the teaching of the basic skills of reading, writing and arithmetic, because, according to them, the students' mastery in these skills was unsatisfactory.(8)

The question of the students' abilities in the basic skills was naturally discussed during the interviews with employers. The impression given to the researcher as a result of these discussions, was that the great majority of employers feel that students are sadly lacking in literacy and numeracy abilities. However, they seem to be resigned to this state of affairs. As one employer put it, "if these young people did not manage to become numerate and literate during nine years of full time schooling, there is no point in trying or wasting more time in the technical schools. They might as well concentrate on learning the technical skills of their trade."

5.4 Finally, employers were asked to say to which degree they considered that employers influence the design and content of the technical school curricula. The responses indicated that the majority of employers believed that this influence was either "small" or "none". More specifically 4.2% stated that they believed employers had "very great" influence, 15.0% "great", 21.7% "moderate", 19.2% "small" and 38.3% "none at all" (U19).

During the interviews many employers expressed their doubts as to the appropriateness and effectiveness of the technical school curricula, which they thought were run on very outmoded traditional lines. This state of affairs they blamed on the lack of effective links between schools and industry. One University educated employer, for example, remarked "our education institutions are heavily bureaucratized, bound to the methodology of the past, and slow to adjust to emerging needs".

Other employers, on the other hand, pointed out that though there was a need for skills, they considered that more important was to inculcate in the youth the proper attitude toward the work and the people they served.

Most employers complained that there were insufficient opportunities for employers to become involved in the

planning of syllabuses for technical schools. They stressed that there was a need for continuous and open discussion between schools and industry, and demanded that employers should be more involved in curriculum development and evaluation of vocational education. The view was also expressed that employers should play a significant role in the certification and accreditation processes.

7. The Training Programme in Industry.

7.1 The training programme in industry has always been a contentious issue. When the first apprenticeship schemes were introduced, detailed syllabuses were drawn up which specified the courses of training of apprentices in industry. These syllabuses were practically ignored by employers who argued that since they paid the trainees, they expected them to be productive.

What irritated employers further was that the Ministry of Labour expected them not only to provide planned training for the apprentices whilst paying them normal wages, but also to pay them in full wages for the days they were at school. Of course there was no law to compel employers to pay these wages and therefore most of them refused to do so.

This particular problem was solved when the Industrial

Training Authority took over the responsibility for paying apprentices the wages they "lost" as a result of going to school. However, the old problem of employers being expected to provide a set programme of training during the industrial training programmes still persists. Employers, on the other hand, seem to hold the view that, things being as they are, they feel that their obligation is to provide work experience for students and not planned training. The only case in which the problem seems to have been to a great degree resolved is that of the hotel training courses. In this case, as explained earlier, the Industrial Training Authority has undertaken to subsidise the remuneration of trainees by 75%.

The above issues were investigated during the survey. The general question put to employers, which served as a springboard for discussing the problem, was the following.

"Do you provide a special planned training programme to I.T.P. students who are under training in your firm?
(Q9).

The responses were as follows.

31.5%	Always
9.0%	Sometimes
59.5%	Never

When questioned further on the subject, most employers admitted that they were more likely to be concerned with immediate production problems rather than the training needs of students. Thus, they added, even if in principle they were willing to offer the best possible training to their young craftsmen, in fact out of necessity most of the training took place in the course of normal production work. There were of course some employers who, far from being apologetic about using students in production work, stressed that in their opinion normal production work was the best possible form of training that could be given to students.

A very important issue related to the above was whether students who worked in production were rotated so that they could cover a wide spectrum of skills. In fact almost all employers who stated that they have a special training programme for I.T.P.students were doing exactly this; they rotated their young craftsmen so that they received varied experience.

The conclusion from the above is that there were practically no firms which offered specially designed training courses for I.T.P.students. Invariably, therefore, students were used in production, either as helpers to a skilled craftsman, or they work on their

own. Obviously what affects the quality of training is whether students are given the opportunity to work in various situations, so that they learn a number of skills. Judged by this criterion, the quality of training of a number of students is sadly lacking, as they perform the same type of repetitive work for long periods. When the researcher challenged some employers to explain if there was sufficient training value in these types of work, the employers admitted that the main reason for using students for this work was that they could not find other people to do it.

The issue of the payment of students was raised by the employers themselves. Many of them expressed the view that as long as they paid students they expected them to be productive, especially since they had no guarantee that these students would stay on with them after they graduated. Some of them went as far as to say that they felt very bitter about the lack of loyalty among young trainees to their employers. They complained that on occasions trainees, on whose training they had invested considerable time and money, were lured away by competitors who offered them slight increases in salary.

According to some employers, the solution to the above problems would be either (a) for the Industrial Training Authority or the Government to subsidise all the I.T. Programmes by returning to the employers part of the

remuneration paid to the trainees, in the same way that this is done for the hotel training courses, or (b) for trainees not to be paid. As to the second solution, they thought it could be very well applied to the training of vocational students who spend in industry only three days a week for one academic year. The way things are, they added, employers subsidise the training of the vocational students. Even worse, they went on, since not all employers are willing to take on students, the burden of training falls on the shoulders of a relatively small number of employers. Therefore, they concluded, it was unfair to put pressure on employers to provide ideal programmes of training. As one employer put it: "If we did not have to pay, things of course would be quite different. The student would not be here to work, but first to explore, to sample, and observe. Then after being exposed to various experiences, he would be given the opportunity to go into greater depth in those fields of work he is most interested in".

7.2 Conclusions

It may be concluded from the above that in many ways the quality of training offered in industry is linked directly to the problem of the payment of trainees. Quite simply since employers pay trainees, they expect them to be productive. Since this is the prime consideration of employers, it seems that if it is in

the interest of the firm to offer such training to a student, that would enable him to tackle more difficult or varied tasks, they will do so. Otherwise there is the tendency for trainees to be used for long periods of time as mere production workers.

8. General Comments by Employers

Finally in the questionnaire, employers were requested to express general comments about the cooperative programmes and suggestions as to their improvement. The most common remarks were the following.

(a) Schools should offer more support. The visits of teachers, who served as I.T.P. inspectors, to industry helped the morale of students and was conducive to ironing out problems and difficulties faced by students. On the other hand, it was pointed out that inspectors should be made aware of the realities of the world of production which they should pass on to their students.

(b) Students should be taught to make some sacrifices for their training. For example to many employers it seemed to be inconceivable that apprentices were paid for the days they go to school.

(c) There were some complaints against the technical school instructors that they were out of touch with modern production methods.

(d) There were suggestions that students of the

technical streams too should be offered cooperative programmes.

9. Summary and General Conclusions

The findings of the survey have shown that employers are generally supportive of the cooperative education concept. Thus, in spite of the fact that they are critical about certain aspects of vocational education, employers value the competencies and attitudes toward work that students gain from the programme. Perhaps the best indication of the employers' good sentiments toward cooperative education is that the I.T. Programmes were the ones they best preferred for the training of their young craftsmen. Also, the employers' responses that they are not seriously inconvenienced by the absence of their young workers when they are at school, is a further indication of the employers' positive attitude towards cooperative education.

The part of the survey which aimed at gauging how satisfied employers were with student performance yielded interesting and illuminating results. The most important of these was perhaps that employers generally rated I.T.P. students higher than their teachers did. Employers, thus, seemed to be very satisfied with the students' willingness, punctuality and cooperation with their co-workers. They were less satisfied, however,

with the students' skills and knowledge. Another significant and relevant finding in this section was that there is a shortage of young trainees. This makes it impossible for employers to choose "better quality" students.

The employers' perception of the quality of work carried out in the Technical Schools is quite favourable. The responses have also shown that, although the schools have not entirely solved the employers' training problems, they have been a considerable help. Employers, on the other hand, do not attach much significance to the leaving diploma for employment purposes. They believe, however, that the diploma is useful for the occupational advancement of young workers. These responses collectively show that employers are not antagonistic to schools.

The responses on the curriculum issues have shown that the great majority of employers feel that more time should be allocated to the teaching of trade skills in the schools. This obviously stems from their desire for the students to be as productive as possible when they are placed in industry.

The question addressed to employers as regards the training programme in industry raised many issues related to the remuneration of the trainees. The survey

has shown that very few employers run special training programmes for their trainees. In fact it seems that the type of tasks that the trainees are asked to perform are practically entirely dictated by the needs of production. This is because employers feel that since they pay the trainees, they have the right to expect them to be productive.

In summing up, it may be said that employers are favourably disposed towards the cooperative programmes mainly because (a) they provide employers with an opportunity to become partners with the schools in training young craftsmen, (b) they reduce recruitment and training problems for employers, and (c) they provide a pool of part-time employees from which employers can select full-time employees for entry-level positions.

NOTES AND REFERENCES.

1. At 15 youngsters complete their compulsory schooling.

2. The technical stream courses are mostly theoretical.

3. Stephen J. Franchak: Evaluating Employer Satisfaction The National Center for Research in Vocational Education, Columbus, Ohio, U.S. 1981 pp22-23.

4. It should be noted that a recent survey conducted by the I.T.A. has indicated that skilled craftsmen in certain metal trades leave the trade prematurely and take up other work. An explanation given for this drain of mature workers is that because these workers are highly paid, employers push them out and employ younger craftsmen and trainees who cost them less.

5. Dino Carelli: "Introduction in Educational Research in Europe: A New Look at the Relationship Between Education and Work" p.5 Unesco 1980.

6. S.J. Franchak: Evaluating Employer Satisfaction, op. cit. p8.

7. For example, in an interesting study of the views of employers in the U.S., carried out by Hubert and Woloszyk, it is stated that "While several publications have identified the functions of advisory committees in cooperative education, little agreement exists among employers as to their legitimate advisory functions. Some studies have indicated an increased need for business and industry participation, whereas other studies have shown that employers view curriculum and programmatic decisions to be the sole function of the educational agency." J.D. Hubert and C.A. Woloszyk: Cooperative Education The National Center of Research in Vocational Education, The Ohio State University, Columbus, Ohio, 1983, p23.

8. As others see Voc. Education _ Manuf. Employers Book 3, p.X and p.X1

CHAPTER THIRTEEN

SOME CONCLUSIONS AND IMPLICATIONS FOR THE FUTURE

1. Introduction

The original purpose of this research was to examine the quality of vocational cooperative education in Cyprus, identify and illuminate its main strengths and weaknesses, and establish its possible potential as a desirable alternative to full-time technical and vocational education in Cyprus.

A major assumption in this research was that cooperative programmes could offer significant economic, social and pedagogical benefits. The guiding hypothesis has been that the vocational cooperative programmes in Cyprus have failed to produce the expected results because of internal and external inefficiencies which stemmed

- (a) from environmental factors, and
- (b) from the way the programmes have been designed and implemented.

During the planning phase of the research the following two broad main areas of interest were identified:

- (a) The historical development of Cyprus vocational

programmes in general, and the cooperative programmes in particular, and

(b) the quality of cooperative programmes as perceived by teachers, students and employers.

This chapter highlights major conclusions from each of the above perspectives and identifies a number of key areas for further research and development. Before proceeding to discuss such conclusions directly, however, it was considered appropriate, in view of the fact that the introduction of the cooperative programmes constituted a major innovation in the education system of the island, to make some tentative observations on the relationships between the accounts of the programme development processes and theories of innovation.

The most pertinent body of theory for the purpose was considered to be that synthesized by Havelock and Huberman (1). This is a wide-ranging theoretical study stemming from research findings of the writers themselves and from other sources. Basically, it is an attempt to apply a systems analysis approach to educational innovation in developing countries, and includes a series of detailed explanations of the various ways in which innovation as a process may function. In the following paragraphs there will be references to some of the most relevant observations and

conclusions reached by the authors, and there will be an examination of how pertinent these are to the introduction and development of the Cyprus vocational cooperative programmes.

2. COMPARISONS WITH THE HAVELOCK AND HUBERMAN MODEL

2.1 "Change and the Functioning of the System"

2.1.1 Havelock and Huberman suggest that initially there seems to be a basic dynamism at work in many projects, as there is a strong desire - often after independence - for major change, which is often manifest in the form of large-scale projects. Some of the possible explanations for this phenomenon given by the authors are the following;

- (a) the demands, after independence, to create radically different programmes and institutions which are less dependent on colonial influence,
- (b) the urgency of attaining economic self-sufficiency, which simultaneously entails massive changes in the school curriculum and rapid development of the out-of-school training network,
- (c) political and economic pressures,
- (d) a conscious divorce of rhetoric and follow-through, i.e. the necessity on the political level to call for and initiate ambitious changes in the education and training system, with the near certainty that the

administrative and technical infrastructure, along with local customs, will reduce the margin of actual change (2).

2.1.2 The above observations reflect quite accurately the innovations in technical education in Cyprus outlined in Chapter 3. As explained in that Chapter, there was at the time great dynamism and strong desire for change. True to the above pattern, the new government completely abolished the existing colonial system of technical education and introduced a new system of its own. In the wake of these changes, the Greek Communal Chamber, which was given jurisdiction over Education, did away with the colonial apprenticeship scheme, which had been run by its predecessor, the colonial Department of Education. This gave the chance to the Ministry of Labour to set up its own Apprenticeship Scheme, and thus gain a foothold in the field of training. The introduction of the Scheme marked the beginning of the strong antagonism between the two Ministries, which, as has been documented, has marred their relations for the past quarter of a century. It may therefore be said that this antagonism might have been averted had the Communal Chamber not discarded the then-existing apprenticeship system.(3)

2.1.3 The authors' model further suggests that there is a demand after independence to create different

programmes and institutions less dependent on colonial influences (4). This was particularly true in the case of Cyprus, where education was conceived to be the medium through which the Greek nationalistic spirit and the desire for union with Greece would be maintained and fostered. In line with this policy, the newly-founded technical schools were traditional Greek schools. As Greek Education was based on humanistic philosophy, to the extent that in the whole country there was not even one technical school, the technical schools in the island suffered accordingly. In spite of the rhetoric, therefore, the island's educational philosophy did not favour technical education. However the government economic policy was that of "urgency of attaining economic self-sufficiency". Consequently, there was strong criticism against the educational policies and "political and economic pressures" were exercised to change them. The Minister of Education, however, had the full backing of the Greek government, and was thus able to withstand the pressures. The refusal of the Ministry of Education to amend its policies did not of course solve the problem of satisfying the needs for skilled labour. Thus the Ministry of Labour, only too readily, stepped in to fill the gap. However, the Ministry had neither the means nor the experience to set up and carry out training programmes of its own.

2.1.4 Havelock and Huberman have the following to say on this point:

Along with this strong desire for change and thus willingness to act, however, is the fact that changes must be carried out in administrative and technical structures which were not designed to cope with projects of such magnitude. The "procedural configurations" are neither developed nor reliable enough to service so many and such different demands. As a result these demands are held up or transformed in such a way as to be more compatible with the existing rules, norms and routines. In doing so, the infrastructure is acting to reduce drastically the rate and magnitude of change which had been the principal goals of the project. There is then a process of reversion whereby the technical and administrative infrastructure protects and preserves itself by reducing the number and variety of new components in a project until they resemble the usual demands and can be serviced in the customary way. In this way the administrative system functions very much like a personality system to reduce the threat of an overload of novelty. It avoids being obliged to behave in ways with which it has too little experience, too little certainty that it can cope successfully without being harmed" (5)

The above explains very appropriately the behaviour of the Ministry of Labour over the Apprenticeship System in Cyprus. Originally this Ministry saw in Apprenticeship its big chance to create a new system of training in the island, which, in their eyes, unlike the training offered in the Ministry of Education Technical Schools, would be efficient in that it would serve the needs of the economy by preparing badly-needed skilled labour for industry. Some of the aims of the Ministry were to incorporate into the System the best elements of apprenticeships in other countries, to set training

standards which would be carefully defined and later adhered to, and work closely with industry and the Trade Unions for successful implementation and running of the scheme.

In spite of the Ministry's enthusiasm and obvious good intentions, however, none of the above was to materialise the way the Ministry planned. Firstly, perhaps, because of inexperience, the Apprenticeship Law prepared according to the Ministry's recommendations and passed by the House of Representatives, turned out to include such inconsistencies that it was not possible to have it fully implemented. By the time the matter was investigated and the Ministry was ready to table a new version of the Law, conditions had changed, as the government had other more urgent priorities to deal with. So Apprenticeship had to manage without the considerable income that would have been derived from the imposition of a levy provided for by the Law, and which was intended to make the System financially independent. Consequently the whole burden of administering the System fell on the slender shoulders of a small department at the Ministry of Labour, which had neither the resources nor the expertise to cope with a project of this magnitude. Even worse, the Ministry was not allowed to build training centres of its own.

As a result, the Ministry of Labour had to depend

entirely on its old adversary, the Ministry of Education, for the implementation of its scheme. Even the curricula were drawn up by the technical school instructors, as the Ministry of Labour had no technical experts of its own. Furthermore, as if to add insult to injury, the Ministry of Education wanted to have nothing to do with the Apprenticeship Scheme.

Thus, the Apprenticeship System, far from becoming the prestigious project that the Ministry of Labour envisaged, was reduced in fact to the least attractive training scheme, to which the less able students were channelled.

Havelock and Huberman's observations in this area, however, do not only apply to Apprenticeship but also to the technical and vocational courses run by the Ministry of Education. As in the model suggested by the authors, the new Republic inherited from the colonial government a small number of very well-equipped schools. These schools, even allowing for the change in the programmes, had the potential to offer sound training. In their haste, however, to provide the industry with as great a number of skilled workers as possible, the government crammed the schools with students far beyond their capacity. Consequently the standard of training dropped.

2.2 "Optimal Political Conditions"

The authors shed further light on the above issues by introducing the concept of "optimal political conditions". These conditions are grouped into three parts. The first part includes those that have to do with authority, power, control and leadership, that is the component that gives energy and direction to the problem-solving cycle. High Authority in this model means that there are people - not always the same - who are making certain that a need is recognized, the problem treated, some solution found, and that there is a follow through in the course of implementation. The focus is on the importance of a mechanism of control of leadership which is itself stable and reliable, and which can ensure that people will perform in conformity with the plan on which the innovation is based.

The second part of "optimal political conditions" is "consensus". It means simply that people involved in a large-scale innovation agree with its objectives and with the way it is being carried out. Finally, the third component of the model is "resources". By these we refer to a large number of highly trained personnel and a good technical and communications infrastructure, as well as available capital for providing more of both (6).

The relevance of the above model to the innovative

programmes in cooperative education in the island is obvious. Firstly, in the case of apprenticeship, the programme was sadly lacking in all three components of the model. The "Authority" was at a very low level because of the disputes between the two Ministries over jurisdiction and control. There was thus lack of firm leadership and policy direction, as well as inadequate problem-solving mechanisms. There was also an obvious lack of consensus, both between the two government ministries and also between the teachers and the government. Lastly there was lack of resources in all three areas referred to in the model, that is personnel, infrastructure and capital.

The vocational programmes, when examined in the light of the model, do not on the whole present a very bright picture either. For although these programmes score quite highly on the first component (Authority) and are quite adequate in the third component (Resources), they are seriously lacking in the second component (Consensus). As has been documented, the most serious problem in this area was caused by the almost complete rejection of the very concept of cooperative programmes by teachers, and also to a considerable degree by parents.

Havelock and Huberman suggest that projects corresponding to the above profile, (Authority+,

Resources+ and Consensus-), tend to be rapidly implemented. The basic problems appear later, on close inspection of what is actually going on inside a classroom. The authors add that a number of clinical studies show that people who are unwilling to do something,(C-), find innumerable ways of conforming superficially to the requests and orders of their superiors (assuming A+), even while they resist those orders or take up their former behaviour patterns when they are not being supervised. Innovations in education, they conclude, are particularly vulnerable to this phenomenon in that people have more and better occasion for resistance.

In the case of the Cyprus cooperative programmes, the performance of the teachers no doubt conformed to the above model at its worst, because their resistance was not even concealed, nor was there any pretence on their part that they agreed with their superiors' policy. On the contrary, they declared openly, both as individuals and through their unions, their resistance to the programme. Perhaps, therefore, one of the basic causes of the problems that ensued was the administrators' inability to win over the teachers. This might have been done through the fuller participation of the teachers in the decision-making processes. The significance of such

participation is illustrated in the next section.

2.3 Participation

Havelock and Huberman have the following to say on the issue of "participation": Innovations are ultimately intended to benefit people, and since people are organized into systems, innovations are also intended to benefit systems. Yet, they argue, an innovation may not in itself constitute the benefit or may not provide the benefit directly. Therefore, all the members of the system have an important stake in deciding upon the innovation and in deciding what constitutes an "improvement" for themselves. The authors go on to observe that this is not an easy and obvious decision, since what may benefit one group or one sub-system may at the same time constitute more work or less benefit for another. Hence the best innovations balance benefits and costs throughout the system to achieve the greatest benefits for the greatest number of members. Thus, they conclude, since there is rarely a way to be completely fair to everyone and to maximize benefits while at the same time spreading them evenly across the members, the pattern of participation among the members of a social system in the decision to adopt or develop an innovation is probably the most central issue in the process(7).

The above is of obvious relevance to the case of the

vocational cooperative programme in Cyprus, which arguably was one of the most significant educational innovations ever to be undertaken in the island. As such it affected many people, as it constituted a radical departure from a major assumption of the traditional educational philosophy that the right place to offer education is in the schools. Yet in spite of the radical changes, some of the principal members of the "system", for example parents and teachers, did not participate sufficiently in the process of change. Of course it may be argued that the educational establishment genuinely believed that the innovation would benefit not only industry, but the students as well. However, it seemed that parents did not share this view and openly opposed the implementation of the new programmes because they thought they were inferior to other educational programmes provided by the state. Therefore the non-participation of parents in the decision-making processes, to adopt and develop the innovations, adversely affected the efficiency of the programme.

In the case of the teachers, the programme was affected adversely, not only by their inadequate participation in the decision-making processes, but also because they were insufficiently informed about the aims of the programme and the processes by which such aims would be achieved. Havelock and Huberman have the following to say on this subject.

Repeated analyses of the innovation process have shown that successful follow-through on the initial decision depends upon the involvement, knowledgeable action, and sustained motivation of numerous members of the system who may or may not be direct beneficiaries of the change. If, for example, teachers are ordered to set specific learning objectives for their students but are not told why or how this should be done and are not allowed to participate in the development of the necessary procedures, they will not understand either what to do or why it should be done. They will resist doing it and when they apply the rule they will do so poorly and inconsistently. The net result may completely confound the intentions of the original decision-making elite, leading to disruption and lowered efficiency of the learning process, and anger and frustration in the teaching profession. Hence participation is not only socially and morally desirable but functionally necessary (8).

2.4 Barriers to Innovation.

In the foregoing paragraphs a number of barriers to innovation were either dealt with in some detail or merely touched upon in passing. It may be useful at this stage to have all these brought together and summarized in one place.

Havelock and Huberman list what they feel to be major areas of the social sciences which have something to say about innovation in developing countries. These include "geographic", "historical", "political", "socio-cultural" and "economic". To this they add a category called "procedural" to encompass the various events that are likely to take place in the life of a project which do not belong clearly in any of the above "disciplinary" groupings. Under each heading, working from literature

and their collective experience, they generated a pool of 67 items. Their analyses rated the following specific barriers as the "most serious" (9) In each, comments are made as regards their significance in the case of the cooperative programmes in Cyprus.

(a) Geographic Barriers: These are listed as the most serious barriers. They include "long distances", "slow transport", "isolation" and "poor climatic conditions". None of these have any serious significance in Cyprus.

(b) Historical Barriers: These are listed as the second most serious barriers. They include items dealing with historical factors, such as traditions opposing innovation and the struggle for independence. These were perhaps the most serious in the Cyprus context.

(c) Economic Barriers: These are rated third in over-all importance. The economic barriers were important in Cyprus, not however in the sense that the country did not have the financial means to implement and sustain the programme. Rather, it may be said that because of the unfavourable situations created as a result of inter-governmental rivalries, the cooperative programmes, especially apprenticeship, were poorly funded.

(d) Procedural Barriers: This category includes the largest number of items and the most diverse set of items. Among various procedural difficulties cited, the most serious were "materials not delivered on time", "lack of skilled manpower to implement the project as planned", "not enough coordination of people in key roles", "insufficient quantity of materials" and "lack of agreement on project objectives".

As indicated earlier in this chapter, procedural barriers had a very serious adverse effect on the cooperative programmes in Cyprus, especially on apprenticeship.

(e) Personal Barriers: These ranked fifth in "seriousness". The strongest items in this group were "there were insufficient rewards for those who would be implementers", "persons in key roles were not open to change their attitudes or behaviour", "rigid and narrow understanding of the project by key persons" and "personality conflicts".

As has been repeatedly stressed in the course of this work, personal and interpersonal factors had a pronounced effect on the development of the programmes. Also insufficient rewards to the implementers, especially the apprenticeship inspectors, had their adverse effect on the programmes.

(f) Social and Cultural Barriers: Under "social and cultural factors" the most significant item was "conflict among ideologies about change". Other noteworthy items in this set were "poor climate for sharing ideas openly" and "significant differences in cultural values".

In the case of the cooperative programmes in Cyprus, the social and cultural barriers were perhaps, together with the historical barriers, the most prominent.

(g) Political Barriers: Lowest ranked in seriousness as a group were the set of items which were labelled "political". The authors remark that while political factors as a whole were not rated as very serious, they clearly were very serious for some projects. For example, they add, "lack of good communication with political leaders" was in some cases rated as a serious problem.

The political barriers in the present case were very serious, and they affected very badly the apprenticeship programme. The nature of the problem was, however, somewhat different to the one suggested above, for the lack of communication was not in this case with political leaders, but between political leaders.

3.0 Concluding Remarks.

3.1 This study has explored the decision-making processes, the implementation and the development of vocational cooperative programmes in Cyprus. In doing so the intention was to reach some detailed understanding of the nature of events that occurred and their impact on the programmes themselves.

The reader is reminded that the guiding hypothesis in this research has been that the vocational cooperative programmes in Cyprus have failed to produce the expected results because of internal and external inefficiencies which stemmed (a) from environmental factors, and (b) from the way programmes have been designed and implemented. On the evidence presented in this research there can be no doubt that the hypothesis is sustained.

3.2 From the complex reality that has been explored, it is possible to reach some generalised conclusions concerning implications for the future. The Havelock and Huberman model that has been used in this chapter, has in fact been useful not only in explaining and interpreting the programme processes in the light of a theoretical framework, but also in suggesting ways of improving current practices. Further elaboration of some conclusions is attempted in the paragraphs below.

Naturally these must be partial and selective representations of the full range of the research study. They do provide however pointers to those aspects of cooperative education programmes most in need of careful consideration.

3.3 The research indicated the importance of cultural factors in the implementation of vocational programmes. Since these programmes are generally regarded as "low-status" programmes, more serious consideration should be given to the reasons that these programmes are held in such low esteem. The reasons may be real or imagined, and also they may be internal or external to the system. Thus, a fuller awareness of what constitutes the prejudice will help the planners adopt the appropriate strategies in the design, the implementation and the development of the programme. In this respect it needs to be particularly appreciated that patterns of job recruitment and reward play a major part in determining the attitudes towards vocational programmes.

3.4 The research suggests that the implementation of vocational programmes, without prior development of the appropriate curriculum and the production of suitable curriculum materials, is a sure prescription for failure. Much of the antagonism of teachers may be attributed to the fact that they were given inadequate support to teach the programmes. Thus, in the case of

the general teachers, in addition to their resentment that they were assigned to teach what they perceived to be less able students, they were further frustrated by the lack of suitable books and other teaching materials. In the absence of appropriate books, teachers were thus forced to use materials designed for academic students. Obviously under such conditions teaching vocational classes was a difficult task which, perhaps justifiably, most teachers resented.

Technical teachers face similar problems, though perhaps not so acute. Again, however, there was inadequate curriculum development, the most obvious manifestation of which was the lack of suitable books and curriculum materials.

3.5 The above suggest that teachers serving in Technical Schools are at a disadvantage. Since therefore teaching in these schools is so unpopular, the existing reward structures should be re-examined with the view to compensating teachers for their unfavourable posting.

3.6 The research suggested that the central importance of evaluation and monitoring has not been fully appreciated and examined. It warrants special emphasis since it intrudes on all aspects of curriculum development and implementation.

3.7 The research showed that the coordination between agencies involved in vocational programmes needs close examination and reconsideration. In this respect it should be appreciated that it is crucial to establish a central body which would have the authority to decide on a comprehensive national policy regarding manpower training in the island. A step in the right direction has been the creation of the Cyprus Industrial Training Authority. However the Authority has no jurisdiction over technical schools. Since by far the greatest proportion of initial training in Cyprus is carried out in the technical schools, it is obvious that this limitation severely curtails the ability of the Authority to design and coordinate a national policy. It may be argued of course that educational institutions, like the technical schools, should not be made subservient to bodies whose main aim is manpower training. However, this research has shown that the drawbacks of the lack of coordination, and the ensuing rivalries, far outweigh any disadvantage that may stem from a centrally designed national training policy.

3.8 In the course of this work, the researcher has come to appreciate that many of the problems and concerns relating to cooperative education are not unique to Cyprus, but are indeed universal. Equally universal seems to be an awareness that the symbiotic needs of education and industry may be accommodated through

cooperative programmes. In concluding therefore it has been considered appropriate to quote the following passage which portrays very eloquently the challenge and potential that are inherent in cooperative education.

Both in-and out-of-school educational experiences contribute to an accurate perception and total development of the attitudes, skills, and knowledge individuals need for their careers. The recognition of this fact has led to the development of many programs which have a experiential learning component. These programs seek to capitalize upon the learning potential that can be derived from experiences in the work sectors of our society.

But educational programs that are conducted outside of schools and use experiential learning as the principal educational process can encounter policy issues difficult to deal with. This is so because of the difficulties involved in creating structures for learning in environments that have other purposes. Because workplaces outside the school are not structured as educational environments, they can present unusual and unfamiliar challenges to those who want to implement an experiential education program. Part of the problem lies in the immensity of the task - both its scope and its manageability, but it also resides in the convergence of the many participants associated with the effort - their diverse motives, perspectives, values, and varying levels of familiarity with and sophistication in carrying out their roles. Collaboration required for policy setting and decision making brings together persons from various sectors (e.g. management, labour, education), some of whom do not fully appreciate each other's perspectives nor fully comprehend the problems involved in fusing education and work experiences. (10)

4.0 On Further Research

4.1 Tracer Studies of Graduates

Little is known of the careers of cooperative programme graduates. As has been suggested earlier, tracer studies of graduates from educational institutions have been commonly used as a tool to generate information which can then be used to increase both the internal and external efficiency of education. G.Psacharopoulos and K. Hinchcliffe suggest that there can be three types of tracer study: the follow up approach which focuses on a sample of students near the time of their graduation and then traces their progress over the next few years; the retrospective approach which takes a sample of graduates from two or three years ago and documents their progress up to the present; and establishment-based surveys which identify employees with a specific educational qualification and again trace their work experience backwards (11). The guidelines suggested by the authors could provide, in all three cases, an excellent framework for very useful tracer studies of graduates of the cooperative programmes in Cyprus.

4.2 Evaluation of Curriculum Materials used in the Cooperative Programmes

As has already been indicated, the role of curriculum

materials is crucial to the success of a programme. This is particularly true in the case of cooperative programmes which demand very often quite different teaching strategies from the ones that are used in academic programmes. It is thus suggested that a research which would concentrate on the evaluation of the curriculum materials used in the programmes, would provide extremely useful information.

In order to provide an indication of the type and the range of evaluation envisaged, an interesting model suggested by R.W.West is summarised below. The author proposes a scheme consisting of five related sections, namely:

(a) A description of course materials, i.e. materials for the teacher, materials for the pupils and other support materials.

(b) An analysis of the antecedent conditions implied by the course materials and/or the course proposers. Sub-divisions within this section deal with assumptions about pupils, teachers and the curriculum within which the course is expected to operate.

(c) An analysis of the rationale and strategy assumed by the course proposers. This section seeks to establish the reason why the course was developed, the nature of organisation of the course content, the explicit aims and objectives of the course, the teaching and learning strategies and finally the methods of assessment and/or

examination outcomes.

(d) This section is evaluative in the sense that the course materials are re-examined in the light of the previous sections to establish the degree to which the course as written exhibits internal consistency between its objectives, content and methods.

(e) A summary of the previous sections which seeks to identify the key questions for the performance and context evaluation. (12)

4.3 Student Attributes

Not enough is known of the cooperative student attributes and the difference between the students studied in this research and those of the full time academic programmes. It is believed that in future development of cooperative programmes more consideration should be given to students' backgrounds, motivations, attitudes and intellectual development.

The research suggests the area that should be considered of highest priority is the one that would entail a systematic investigation of the knowledge and skills of students at the time of entry to vocational cooperative courses. This must include examination of general levels of achievement in reading, self expression and numerical skills. It should also seek to establish the range of variation in such attributes.

4.4 Teacher Attributes

Doubtless, the introduction of cooperative programmes posed severe challenges to teachers, who in these programmes saw many of the foundations on which education practice has long been based, being shaken. But educators in particular have to understand this development which is of great significance in the education of a large section of the student population. In order to win them over however it is essential to find out more about them, especially how they think and how they feel. Systematically collected and interpreted information on teacher attributes, apart from quantitative statistics, is severely lacking. Innovations that depend primarily on changes in teacher behaviour cannot be rationally planned without deep understanding of the nature of current behaviour of teachers. This suggests that areas such as patterns of classroom interaction and teaching styles need to be researched. Also vocational classroom observation studies focused on teachers' and pupils' actual behaviour and the charting of the relative importance of such factors as teacher qualification and training levels in cooperative courses of various types, could illuminate the nature of the problem.

This research however also suggests that parameters that

affect the motivation and morale of teachers in the technical school are at least of equal importance as those that focus on teacher ability and training, and need therefore to be investigated.

NOTES AND REFERENCES

1. R.G.Havelock and A.M.Huberman: Solving Educational Problems - The Theory and Reality of Innovation in Developing Countries Unesco 1977

2.Ibid. p 71-72

3. The reader is reminded that, as explained in Chapter 4, one of the reasons that the Ministry of Labour, and not the Greek Communal Chamber was given jurisdiction over apprenticeship was that the government had decided that the Apprenticeship Scheme should be intercommunal. However the government decision was taken three years after the Chamber had discontinued the old apprenticeship system. Therefore the argument that the antagonism between the two Ministries would have been averted, had the Chamber not discarded the then-existing apprenticeship system, is valid.

4.Ibid. p 72

5.Ibid. p 72

6.Ibid. p 76-85

7.Ibid. p 194

8.Ibid. pp 194-195

9.Ibid. pp 220-227

10.R.Miguel et al: Experiential Education Policy Lines op.cit.

11.G. Psacharopoulos and K.Minchcliffe: Tracer Study Guidelines Education Department, The World Bank, September 1983

12.R.W.West: The Summative Evaluation of Curriculum Innovations University of Sussex 1975.

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APPENDIX 1 - QUESTIONNAIRES AND RESPONSES

SECTION 1 -HOTEL STUDENT QUESTIONNAIRE

(a) The purpose of this questionnaire is to find out what you think about your industrial training programme.

The questionnaire contains a number of statements and questions about the industrial training programme. We want to know what you personally feel and think about the issues presented. This is not a test and there are no right or wrong answers.

(b) Underline the reply that indicates your opinion, or complete as necessary.

(c) If you need an explanation ask for help.

Q.1 (U1) I am a:

1. Boy
2. Girl

Q.2 (U2) My father's occupation is:

1. Professional
2. White collar
3. Technician
4. Skilled Worker
5. Unskilled Worker
6. Agriculture-Fisheries
7. Self-employed
8. Other

Q.3 (U3) My mother's occupation is:

1. Professional
2. White collar
3. Technical
4. Skilled Worker
5. Unskilled Worker
6. Agriculture-Fisheries
7. Self-employed
8. Housewife
9. Other

Q.4 (U4) My father's education is:

1. Never went to school
2. Attended elementary school for a few years
3. Finished elementary school
4. Attended secondary school for a few years
5. Finished secondary school
6. Attended college
7. Graduated university

Q.5 (U5) My mother's education is:

1. Never went to school
2. Attended elementary school for a few years
3. Finished elementary school
4. Attended secondary school for a few years
5. Finished secondary school
6. Attended college
7. Graduated university

Q.6 (U6) To which degree has the Industrial Training Programme helped you learn your trade?

1. Very much
2. Much
3. Moderately
4. Little
5. Very little

Q.7 (U7) I believe that the duration of the Industrial Training Programme should:

1. Be increased
2. Stay the same
3. Be shortened
4. Be abolished

Q.8 (U8) How pleased are you with your earnings during the period of your industrial training?

1. Very pleased
2. Pleased
3. Fairly pleased
4. Displeased
5. Very displeased

Q.9 (U9) How friendly do you find the atmosphere in your place of work?

1. Very friendly
2. Friendly
3. Moderately friendly
4. Not so friendly
5. Not at all friendly

Q.10 (U10) The respect I felt for those I worked with was

1. Very great
2. Great
3. Fair
4. Little
5. Very little

Q.11 (U11) How physically tired were you after a day's work?

1. Very tired
2. Tired
3. Moderately tired
4. Little tired
5. Not tired at all

Q.12 (U12) State ways by which the industrial training programme could be improved.

Q.13 (U13) I believe that the length of the course for the hotel trades should:

1. Stay as it is now, i.e. it should be two years and finish at the end of the fifth form
2. Be extended by one year and finish at the end of the sixth year

Q.14 (U14) As regards the allocation of periods in the school programme, I would prefer:

1. That we should have more periods of general subjects and fewer periods of specialisation subjects
2. That the programme should stay as it is now
3. That we should have more periods of specialisation and fewer periods of general subjects

Q.15 (U15) How would you describe the quality of education offered by your school in the subjects of specialisation?

1. Very good
2. Good
3. Fair
4. Not satisfactory
5. Not at all satisfactory

Q.16 (U16) How would you describe the quality of education offered by your school in the general subjects?

1. Very good
2. Good
3. Fair
4. Not satisfactory
5. Not at all satisfactory

Q.17 (U17) State ways by which the education offered at school could be improved

Q.18 (U18) How pleased are you with your choice of trade?

1. Very pleased
2. Pleased
3. Moderately pleased
4. Little pleased
5. Not at all pleased

RESPONSES

TO HOTEL STUDENTS' QUESTIONNAIRE

U1: Student Sex

1.	139	93.3%
2.	10	6.7%
Missing	1	

U2: Fathers' Occupation

1.	0	0.0%
2.	13	9.0%
3.	0	0.0%
4.	53	36.6%
5.	33	22.8%
6.	45	28.3%
7.	5	3.4%
8.	0	0.0%
Missing	5	

U3. Mothers' Occupation

1.	0	0.0%
2.	1	0.7%
3.	1	0.7%
4.	4	2.7%
5.	14	9.7%
6.	3	2.0%
7.	0	0.0%
8.	122	84.1%
9.	0	0.0%
Missing	5	

U4. Fathers' Education

1.	3	2.0%
2.	63	43.4%
3.	50	34.9%
4.	16	11.0%
5.	10	6.9%
6.	1	0.6%
7.	2	1.4%
Missing	5	

U5. Mothers' Education

1.	18	12.4%
2.	70	48.3%
3.	38	26.2%
4.	11	7.6%
5.	8	5.5%
6.	0	0.0%
7.	0	0.0%
Missing	5	

U6. Programme Contribution to Trade Learning

1.	101	67.3%
2.	26	17.3%
3.	14	9.3%
4.	2	1.3%
5.	3	2.0%
Missing	4	

U7. Duration of the Industrial Training Programme

1.	112	74.7%
2.	28	18.7%
3.	5	3.7%
4.	1	0.7%
Missing	4	

U8. Students' Earnings

1.	40	26.7%
2.	74	49.3%
3.	18	12.0%
4.	9	6.0%
5.	6	4.0%
Missing	3	

U9. The Atmosphere at Work

1.	46	30.7%
2.	70	46.7%
3.	23	15.3%
4.	6	4.0%
5.	5	3.3%
Missing	0	

U10. Student Respect for Others

1.	56	37.3%
2.	48	32.0%
3.	35	23.3%
4.	5	3.3%
5.	4	2.7%
Missing	2	

U11. Student Fatigue

1.	23	15.3%
2.	42	28.0%
3.	33	22.0%
4.	30	20.0%
5.	20	13.3%
Missing	2	

U12. Ways to improve the industrial training programme

1. Make it longer	40, 27%
2. Improve Quality	15, 10%
3. Closer contact between hotel and schools	30, 20%
4. Explain programme to hotels	10, 7%
5. Students should have more rights	12, 8%
6. Students be allowed to live in hotels	12, 8%
7. Students should make greater effort	13, 9%

U13. Duration of the course

1.	88	58.7%
2.	62	41.3%
Missing	0	

U14. Period Allocation

1.	4	2.7%
2.	37	24.7%
3.	106	70.7%
Missing	3	

U15. Quality of Technical Subjects

1.	28	18.7%
2.	44	29.3%
3.	37	24.7%
4.	7	4.7%
5.	28	18.7%
Missing	6	

U16. Quality of General Subjects

1.	40	26.7%
2.	63	42.0%
3.	27	18.0%
4.	8	5.3%
5.	9	6.0%
Missing	3	

U17. Ways to improve education offered at school

1. More periods of workshop practice	46,	30.7%
2. More periods of specialisation	82,	54.7%
3. Get better teachers	17,	11.3%
4. Improve school equipment	13,	8.7%
5. Increase periods at school	4,	2.7%
6. Extend course by one year	2,	1.3%
7. Course satisfactory, could not be improved	3,	2.0%

U18. Satisfaction with choice of trade

1.	82	54.7%
2.	38	24.3%
3.	19	12.7%
4.	3	2.0%
5.	2	1.3%
Missing	6	

APPENDIX 1 - SECTION 2

APPRENTICES AND SIXTH VOCATIONAL STUDENTS'
QUESTIONNAIRE

The purpose of this questionnaire is to find out what you think about your industrial training programme. The questionnaire contains a number of statements and questions about the industrial training programme. We want to know what you personally feel and think about the issues presented. This is not a test and there are no right or wrong answers.

Underline the reply that indicates your opinion, or complete as necessary.

If you need an explanation ask for help.

Q.1 (V1) I am a:

1. Boy
2. Girl

Q.2 (V2) I am enrolled in the:

1. Apprenticeship Programme
2. Vocational Programme

Q.3 (V3) My father's occupation is:

1. Professional
2. White collar
3. Technician
4. Skilled Worker
5. Unskilled Worker
6. Agriculture-Fisheries
7. Self-employed
9. Other

Q. 4 (V4) My mother's occupation is:

1. Professional
2. White collar
3. Technician
4. Skilled Worker
5. Unskilled Worker
6. Agriculture-Fisheries
7. Self-employed
8. Housewife
9. Other

Q.5 (V5) My father's education is:

1. Never went to school
2. Attended elementary school for a few years
3. Finished elementary school
4. Attended secondary school for a few years
5. Finished secondary school
6. Attended college
7. Graduated university

Q.6 (U6) My mother's education is:

1. Never went to school
2. Attended elementary school for a few years
3. Finished elementary school
4. Attended secondary school for a few years
5. Finished secondary school
6. Attended college
7. Graduated university

Q.7 (U7) My work experience is related to my trade:

1. Very much
2. Quite a lot
3. Somewhat
4. Just a little
5. Not at all

Q.8 (U8) I enjoy working in industry:

1. Very much
2. Quite a lot
3. Somewhat
4. Just a little
5. Not at all

Q.9 (U9) My work experience has helped me to understand better what type of knowledge and skills I need in order to work efficiently in my trade:

1. Very much
2. Quite a lot
3. Somewhat
4. Just a little
5. Not at all

Q.10 (U10) I think that what I am learning now at the job site will be helpful to me later in my career:

1. Very much
2. Quite a lot
3. Somewhat
4. Just a little
5. Not at all

Q.11 (U11) The kind of work I am doing at the job site is:

1. Extremely interesting
2. Very interesting
3. Quite interesting
4. Not so interesting
5. Not at all interesting

Q.12 (U12) The attitude of people at my job site is:

1. Extremely friendly
2. Very friendly
3. Quite friendly
4. Not so friendly
5. Not at all friendly

Q.13 (V13) On the job site I am given work which helps me learn my trade:

1. Very often
2. Often
3. Sometimes
4. Rarely
5. Very rarely

Q.14 (V14) My supervisor at the job site asks for my opinion on how a piece of work should be done and I am given some degree of initiative:

1. Very often
2. Often
3. Sometimes
4. Rarely
5. Very rarely

Q.15 (V15) The respect and regard I have for people at work is:

1. Very great
2. Great
3. Moderate
4. Little
5. Very little

Q.16 (V16) In the industry I am given full and clear explanations on how to perform my duties:

1. Very often
2. Often
3. Sometimes
4. Rarely
5. Very rarely

Q.17 (V17) I believe that the training I am receiving during my job experience is the best that the firm could provide:

1. Strongly agree
2. Agree
3. Uncertain
4. Disagree
5. Strongly disagree

Q.18 (V18) The nature of the work in the industry where I have my training is so wide that it could cover all sections of the technical syllabus that are taught at school:

1. Yes, absolutely
2. Yes, to a great degree
3. Moderately
4. No, it is rather limited
5. No, it is very limited

Q.19 (V19) After a full day's work I feel physically tired:

1. Very often
2. Often
3. Sometimes
4. Rarely
5. Very rarely

Q.20 (V20) I feel the respect people have for me at the place of work is:

1. Very great
2. Great
3. Moderate
4. Little
5. Very little

Q.21 (V21) What I am taught at school and what I do at work match:

1. Very well
2. Quite well
3. Fairly well
4. Only a little
5. Not at all

Q.22 (V22) If it were decided to abolish the work experience programme, and as a result I had to go back to school on a full-time basis:

1. I would be very pleased
2. I would be pleased
3. I would not care
4. I would be sorry
5. I would be very sorry

Q.23 (V23) At school I am given the opportunity to discuss with my teachers, and share with my mates, the experiences I have in industry:

1. Very often
2. Often
3. Sometimes
4. Rarely
5. Very rarely

Q.24 (V24) During my work experience I use the theory I was taught at school:

1. To a great degree
2. Considerably
3. Somewhat
4. To a small degree
5. Never

Q.25 (V25) During my work experience I use the practical skills I was taught at school:

1. To a great degree
2. Considerably
3. Somewhat
4. To a small degree
5. Never

Q.26 (V26) The help I receive from my teacher-supervisor is:

1. Very great
2. Considerable
3. Satisfactory
4. Small
5. Non-existent

Q.27 (V27) The type of equipment I use during my work experience, compared to the equipment we have at school is:

1. Much more modern
2. More modern
3. About the same
4. Less modern
5. Much less modern

Q.28 (V28) During my work experience I acquire knowledge and skills that I would not be able to acquire at school:

1. Many
2. A few
3. None

Q.29 (V29) My supervisor at the job site is critical of my work:

1. Very often
2. Often
3. Occasionally
4. Rarely
5. Very rarely

Q.30 (V30) My supervisor in industry has a well planned programme of work for me:

1. Very often
2. Often
3. Occasionally
4. Seldom
5. Never

Q.31 (V31) I feel that the type of work I am asked to do at the job site is well suited to my abilities:

1. Always
2. Often
3. Occasionally
4. Seldom
5. Never

Q.32 (V32) I work conscientiously at my work and I offer as much as I can:

1. Always
2. Often
3. Occasionally
4. Seldom
5. Never

Q.33 (V33) If I have a problem at my work I feel I can discuss it freely with my supervisor:

1. Always
2. Often
3. Occasionally
4. Seldom
5. Never

Q.34 (V34) I would like the number of days I attend school:

1. To be increased
2. To remain the same
3. To be decreased

Q.35 (V35-V42) Indicate whether you would like to be taught:

1. Many more periods
2. More periods
3. Same periods
4. Fewer periods
5. Far fewer periods

in each of the following subjects:

- (a) Greek
- (b) Mathematics
- (c) English
- (d) Physics
- (e) Technology
- (f) Technical Drawing
- (g) Workshops
- (h) Mechanics

Q.36 (V43) As far as my achievement at school goes, I regard myself:

1. Excellent
2. Good
3. Average
4. Unsatisfactory
5. Weak

Q.37 (V45-V52) Indicate whether you find:

1. Very easy
2. Easy
3. Appropriate
4. Difficult
5. Very difficult

each of the following subjects:

- (a) Greek
- (b) Mathematics
- (c) English
- (d) Physics
- (e) Technology
- (f) Technical Drawing
- (g) Workshop
- (h) Mechanics

Q.38 (V53-V60) Indicate whether you like:

- 1. Very much
- 2. Quite
- 3. Rather
- 4. Little
- 5. Very little

each of the following subjects:

- (a) Greek
- (b) Mathematics
- (c) English
- (d) Physics
- (e) Technology
- (f) Technical Drawing
- (g) Workshops
- (h) Mechanics

Q.39 (V61-V68) Indicate whether you find:

- 1. Very useful
- 2. Quite useful
- 3. Rather useful
- 4. Rather not useful
- 5. Not at all useful

each of the following subjects:

- (a) Greek
- (b) Mathematics
- (c) English
- (d) Physics
- (e) Technology
- (f) Technical Drawing
- (g) Workshops
- (h) Mechanics

Q.40 (V69) All students, including apprentices, should wear uniform at school:

- 1. Strongly agree
- 2. Agree
- 3. Uncertain
- 4. Disagree
- 5. Strongly disagree

Q.41 (U70) How strict do you think is the school discipline?

1. Very strict
2. Strict
3. Moderate
4. Lax
5. Very lax

Q.42 (U71) How fairly and reasonably does the school treat students?

1. To a very high degree
2. To a high degree
3. Moderately
4. To a small degree
5. To a very small degree

Q.43 (U72) The trade that I am learning now is the one I intended to follow when I first entered the technical school

1. Yes
2. No

Q.44 (U73) The main reason for not enrolling for the trade I wanted is:

1. There were no places available
2. The trade was not taught at school
3. Other people pressured me
4. I was too weak in certain subjects
5. The pay was too low
6. Any other (specify)

Q.45 (U74) How pleased are you with your occupation?

1. Very pleased
2. Quite pleased
3. Uncertain
4. Not pleased
5. Not at all pleased

Q.46 (U75) Realistically, what chances do you have to continue your education at an institution of higher learning, (eg. The Higher Technical Institute)?

1. Many
2. Considerable
3. Fair
4. A few
5. None at all

Q.47 (U76) Which is your greatest ambition?

Q.48 (U77) What chances do you have for this ambition to be realised?

1. Many
2. Considerable
3. Fair
4. A few
5. None at all

Q.49 (U78) If I were completely free to choose again another occupation to the one I have now, I would choose one of the following three occupations

- (a) _____
- (b) _____
- (c) _____

Q.50 (U79) Are you satisfied with your wages?

1. Yes
2. No

RESPONSES

TO PUPIL QUESTIONNAIRE (APPRENTICES AND SIXTH VOCATIONAL)

U1. Student sex:

1.	488	97.4%
2.	13	2.6%

U2. Type of Programme:

1.	218	43.6%
2.	283	56.4%

U3. Father's Occupation:

1.	0	0.0%
2.	44	9.0%
3.	4	0.8%
4.	248	50.7%
5.	93	19.0%
6.	72	14.7%
7.	28	5.7%
9.	0	0.0%
Missing	12	

U4. Mother's Occupation:

1.	1	0.2%
2.	4	0.8%
3.	1	0.2%
4.	19	3.8%
5.	51	10.3%
6.	1	0.2%
7.	0	0.0%
8.	420	84.5%
9.	0	0.0%
Missing	4	

U5. Father's Education:

1.	15	3.0%
2.	203	41.1%
3.	187	37.9%
4.	49	9.8%
5.	32	6.8%
6.	4	0.9%
7.	4	0.9%
Missing	7	

U6. Mother's Education:

1.	35	7.1%
2.	245	49.5%
3.	161	32.5%
4.	34	6.9%
5.	19	3.8%
6.	1	0.2%
7.	0	0.0%
Missing	6	

U7. Work experience in relation to trade:

1.	323	65.4%
2.	79	16.0%
3.	46	9.3%
4.	34	6.9%
5.	12	2.4%
Missing	7	

U8. Students' work enjoyment:

1.	227	45.8%
2.	138	27.8%
3.	99	20.0%
4.	32	6.5%
5.	0	0.0%
Missing	5	

U9. Promotion of trade understanding:

1.	233	47.0%
2.	146	29.4%
3.	99	20.0%
4.	8	1.6%
5.	10	2.0%
Missing	5	

U10. Effect of job site learning on future career:

1.	304	61.0%
2.	118	23.7%
3.	54	10.8%
4.	13	2.6%
5.	9	1.8%
Missing	3	

U11. Students' interest in work:

1.	184	36.9%
2.	170	34.1%
3.	103	20.7%
4.	30	6.0%
5.	11	2.2%
Missing	3	

U12. Friendliness at work:

1.	256	51.3%
2.	129	25.9%
3.	81	16.2%
4.	24	4.8%
5.	9	1.8%
Missing	2	

U13. Job site work in relation to trade:

1.	247	49.6%
2.	147	29.5%
3.	74	14.9%
4.	15	3.0%
5.	15	3.0%
Missing	3	

U14. Initiative allowed to students:

1.	148	29.7%
2.	152	30.5%
3.	112	22.5%
4.	45	9.0%
5.	41	8.2%
Missing	3	

U15. Respect of students for others:

1.	257	51.6%
2.	157	31.5%
3.	68	13.7%
4.	8	1.6%
5.	8	1.6%
Missing	5	

U16. Clarity of instruction in industry:

1.	230	46.0%
2.	175	35.0%
3.	59	11.8%
4.	13	2.6%
5.	23	4.6%
Missing	1	

U17. Quality of training:

1.	236	47.2%
2.	164	32.8%
3.	68	13.6%
4.	13	2.6%
5.	19	3.8%
Missing	1	

U18. Range of training:

1.	136	27.5%
2.	155	31.4%
3.	141	28.5%
4.	25	5.1%
5.	37	7.5%
Missing	7	

U19. Students' Tiredness:

1.	101	20.3%
2.	126	25.4%
3.	189	38.0%
4.	53	10.7%
5.	28	5.6%
Missing	4	

U20. Respect of others for students:

1.	248	49.8%
2.	116	23.3%
3.	84	18.9%
4.	27	5.4%
5.	37	7.4%
Missing	3	

U21. Compatibility of school programme and work experience:

1.	188	37.3%
2.	143	28.7%
3.	96	19.2%
4.	34	6.8%
5.	37	7.4%
Missing	3	

U22. Effect of abolition of the I.T.P:

1.	107	21.4%
2.	77	15.4%
3.	105	21.0%
4.	92	18.4%
5.	112	13.6%
Missing	2	

U23. Discussion of work experiences at school:

1.	99	19.8%
2.	182	36.5%
3.	148	29.7%
4.	27	5.4%
5.	43	8.6%
Missing	2	

U24. Use at work of theory taught at school:

1.	73	14.7%
2.	212	42.7%
3.	121	24.4%
4.	55	11.1%
5.	35	7.1%
Missing	5	

U25. Use at work of skills taught at school:

1.	85	17.1%
2.	215	43.2%
3.	93	18.7%
4.	66	13.0%
5.	39	7.8%
Missing	3	

U26. Degree of help from teacher-supervisor:

1.	97	19.6%
2.	149	30.0%
3.	82	16.5%
4.	49	9.9%
5.	119	24.0%
Missing	5	

U27. Equipment in industry compared to that of school:

1.	193	39.1%
2.	136	27.5%
3.	129	26.1%
4.	24	4.9%
5.	12	2.4%
Missing	7	

U28. Substitute of work experience by school:

1.	365	73.4%
2.	115	23.2%
3.	16	3.2%
Missing	5	

U29. Criticism from the supervisor:

1.	57	11.4%
2.	108	21.6%
3.	181	36.3%
4.	85	17.0%
5.	68	13.6%
Missing	2	

U30. Planning of work programme:

1.	184	37.1%
2.	163	32.8%
3.	90	18.1%
4.	32	6.4%
5.	28	5.6%
Missing	4	

U31. Suitability of work in relation to ability:

1.	206	41.5%
2.	186	37.5%
3.	81	16.3%
4.	12	2.4%
5.	11	2.2%
Missing	5	

U32. Conscientiousness at work:

1.	383	76.8%
2.	93	18.6%
3.	14	2.8%
4.	3	0.6%
5.	6	1.2%
Missing	2	

U33. Ease of communication with the supervisor:

1.	195	39.5%
2.	232	47.0%
3.	66	13.4%
4.	1	0.2%
5.	0	0.0%
Missing	7	

U34. Days at school:

1.	101	39.0%
2.	232	47.5%
3.	66	13.4%
Missing	2	

U35. Periods of Greek:

1.	52	10.7%
2.	71	14.6%
3.	283	58.4%
4.	44	9.1%
5.	35	7.2%
Missing	16	

U36. Periods of Mathematics:

1.	68	14.1%
2.	116	24.0%
3.	213	44.1%
4.	53	11.0%
5.	33	6.8%
Missing	18	

U37. Periods of English:

1.	86	18.0%
2.	102	21.3%
3.	222	46.4%
4.	39	8.2%
5.	29	6.1%
Missing	23	

U38. Periods of Physics:

1.	13	5.1%
2.	29	11.3%
3.	133	51.8%
4.	57	22.2%
5.	25	9.7%
Missing	244	

(Note: Apprentices are not taught Physics)

U39. Periods of Technology:

1.	134	27.8%
2.	133	27.6%
3.	177	36.7%
4.	29	6.0%
5.	9	1.9%
Missing	19	

U40. Periods of Technical Drawing:

1.	121	25.3%
2.	108	22.5%
3.	188	39.2%
4.	40	8.4%
5.	22	4.6%
Missing	22	

U41. Periods of Workshops:

1.	177	36.3%
2.	124	25.5%
3.	126	25.9%
4.	39	8.0%
5.	21	4.3%
Missing	14	

U42. Periods of Mechanics:

1.	10	4.0%
2.	23	8.9%
3.	96	37.1%
4.	70	27.4%
5.	56	21.8%
Missing	244	

(Note: Apprentices are not taught Mechanics)

U43. Perception of achievement at school:

1.	27	5.4%
2.	122	24.4%
3.	224	44.8%
4.	120	24.0%
5.	7	1.45
Missing	1	

U44. Perception of achievement at work:

1.	75	15.2%
2.	263	53.3%
3.	133	27.0%
4.	19	3.9%
5.	3	0.6%
Missing	8	

U45. Level of difficulty of Greek:

1.	151	30.5%
2.	149	30.1%
3.	174	34.9%
4.	14	2.8%
5.	8	1.6%
Missing	6	

U46. Level of difficulty of Mathematics:

1.	79	16.0%
2.	112	22.7%
3.	187	37.9%
4.	82	16.6%
5.	33	6.7%
Missing	8	

U47. Level of difficulty of English:

1.	67	13.9%
2.	113	23.4%
3.	198	41.0%
4.	76	15.7%
5.	29	6.0%
Missing	18	

U48. Level of difficulty of Physics:

1.	21	8.1%
2.	65	25.2%
3.	128	49.6%
4.	33	12.8%
5.	11	4.3%
Missing	243	

(Note:- Apprentices are no taught Physics)

U49. Level of difficulty of Technology:

1.	98	19.8%
2.	130	26.3%
3.	209	42.3%
4.	44	8.9%
5.	13	2.6%
Missing	7	

U50. Level of difficulty of Technical Drawing:

1.	132	27.1%
2.	142	29.2%
3.	158	32.4%
4.	42	8.6%
5.	13	2.7%
Missing	14	

U51. Level of difficulty of Workshops:

1.	215	43.7%
2.	111	22.6%
3.	155	31.5%
4.	6	1.2%
5.	5	1.0%
Missing	9	

U52. Level of difficulty of Mechanics:

1.	13	4.9%
2.	13	4.9%
3.	80	30.9%
4.	100	39.0%
5.	52	20.35
Missing	243	

(Note:- Apprentices are not taught Mechanics)

U53. Liking Greek:

1.	124	25.3%
2.	101	20.6%
3.	166	33.8%
4.	79	16.1%
5.	21	4.3%
Missing	10	

U54. Liking Mathematics:

1.	106	21.9%
2.	92	19.0%
3.	149	30.7%
4.	97	20.0%
5.	41	8.55%
Missing	16	

U55. Liking English:

1.	112	23.3%
2.	97	20.2%
3.	145	30.1%
4.	93	19.3%
5.	34	7.1%
Missing	20	

U56. Liking Physics:

1.	30	11.5%
2.	37	14.2%
3.	99	37.9%
4.	63	24.1%
5.	32	12.3%
Missing	240	

(Note:- Apprentices are not taught Physics)

U57. Liking Technology:

1.	196	40.1%
2.	128	26.2%
3.	114	23.3%
4.	31	6.3%
5.	20	4.1%
Missing	12	

U58. Liking Technical Drawing:

1.	203	41.4%
2.	130	26.5%
3.	103	21.0%
4.	36	7.3%
5.	18	3.7%
Missing	11	

U59. Liking Workshops:

1.	195	60.2%
2.	89	18.2%
3.	69	14.1%
4.	24	4.9%
5.	13	2.7%
Missing	11	

U60. Liking Mechanics:

1.	17	6.5%
2.	27	10.6%
3.	35	13.8%
4.	123	48.0%
5.	54	21.1%
Missing	245	

(Note:- Apprentices are not taught Mechanics)

U61. Usefulness of Greek:

1.	117	23.9%
2.	154	31.4%
3.	140	28.6%
4.	47	9.6%
5.	32	6.5%
Missing	11	

U62. Usefulness of Mathematics:

1.	231	46.9%
2.	157	31.8%
3.	72	14.6%
4.	18	3.7%
5.	15	3.0%
Missing	8	

U63. Usefulness of English:

1.	227	46.6%
2.	147	30.2%
3.	82	16.8%
4.	13	2.7%
5.	18	3.7%
Missing	14	

U64. Usefulness of Physics:

1.	26	9.9%
2.	64	24.4%
3.	87	33.2%
4.	51	19.5%
5.	34	13.0%
Missing	239	

(Note:- Apprentices are not taught Physics)

U65. Usefulness of Technology:

1.	359	72.4%
2.	92	18.5%
3.	32	6.5%
4.	5	1.0%
5.	8	1.6%
Missing	5	

U66. Usefulness of Technical Drawing:

1.	319	64.7%
2.	95	19.3%
3.	51	10.3%
4.	14	2.8%
5.	14	2.8%
Missing	8	

U67. Usefulness of Workshops:

1.	387	78.2%
2.	71	14.3%
3.	21	4.2%
4.	9	1.8%
5.	7	1.4%
Missing	6	

U68. Usefulness of Mechanics:

1.	43	16.5%
2.	25	9.4%
3.	70	29.1%
4.	76	29.1%
5.	48	18.1%
Missing	239	

(Note:- Apprentices are not taught Mechanics)

U69. School uniform:

1.	139	27.9%
2.	73	14.7%
3.	62	12.4%
4.	54	10.8%
5.	170	34.1%
Missing	3	

U70. School discipline:

1.	151	30.2%
2.	188	37.6%
3.	120	24.0%
4.	14	2.8%
5.	27	5.4%
Missing	1	

U71. Perception of treatment at school:

1.	64	12.8%
2.	163	32.7%
3.	160	32.1%
4.	55	11.0%
5.	57	11.4%
Missing	2	

U72. Satisfaction with original choice:

1.	379	
2.	115	
Missing	7	

U73. Reasons for not following trade of choice:

1.	34	28.3%
2.	22	18.3%
3.	20	16.7%
4.	34	28.3%
5.	6	5.0%
6.	4	3.3%

U74. Satisfaction with occupation:

1.	164	33.4%
2.	189	38.5%
3.	78	15.9%
4.	41	8.4%
5.	19	3.9%
Missing	10	

U75. Educational advancement:

1.	24	5.0%
2.	44	9.1%
3.	142	29.5%
4.	168	34.9%
5.	104	21.6%
Missing	19	

U76. Ambition:

1.	261	54.4% (Owner of a workshop)
2.	119	24.8% (Become a good craftsman)
3.	48	10.0% (Become supervisors)
4.	26	5.4% (Follow a white-collar career)
5.	10	2.0% (Enter the civil service)
6.	14	2.8% (Others)
Missing	23	

U77. Realisation of ambition:

1.	127	26.6%
2.	172	36.0%
3.	115	24.1%
4.	38	7.9%
5.	24	5.2%
Missing	22	

U78. Alternative occupation:

1.	213	47.1% (3 craft trades)
2.	100	42.2% (2 craft and one white collar)
3.	65	14.4% (2 white collar and one craft)
4.	67	14.8% (3 white collar trades)
5.	56	

U79. Satisfaction with remuneration:

1.	234	48.8%
2.	245	51.2%
Missing	20	

APPENDIX 1 SECTION 3

QUESTIONNAIRE ON HOW TEACHERS PERCEIVE
COOPERATIVE EDUCATION

DIRECTIONS:

1. Please underline the reply that indicates your opinion, or complete as appropriate.
2. Space is provided for any relevant comments you may wish to make.
3. You do not need to write your name.

Q.1 (V1) I am a:

1. Teacher of general subjects
2. Teacher of technical subjects

Q.2 (V2) I am:

1. Male
2. Female

Q3. (V3) Age:

1. 21-25
2. 25-30
3. 31-35
4. 36-40
5. 41-45
6. 46-50
7. 51-55
8. 56-60

Q.4 (V4) I have the following professional qualifications (underline the highest):

1. Leaving Certificate of General Secondary School
2. Leaving Certificate of Technical School
3. Vocational Courses at the Cyprus Productivity Centre
4. Vocational Courses abroad
5. Higher Education Certificate or Diploma (eg. Higher Technical Institute)
6. First University Degree (B.A., B.Sc.)
7. Second University Degree (M.A., M.Sc.)

Q.5 (V5) I have the following pedagogical qualifications:

1. None
2. Course at Pedagogical Institute
3. Teacher Certificate
4. M.A. in Pedagogics or above

Q.6 (U6) For Technical Teachers:

Industrial experience before appointment:

1. 0 years
2. 1-2 years
3. 3-5 years
4. 6-10 years
5. 11-15 years
6. Over 15 years

Q7. (U7) For Teachers of General Subjects:

Teachers of general subjects are better off serving at a Gymnasium (lower secondary) of a Lyceum (higher secondary), rather than at the Technical School:

1. Strongly agree
2. Agree
3. Undecided
4. Disagree
5. Strongly disagree

The rest of the questions are addressed to ALL Teachers.

Q.8 (U8) Note with numbers 1,2 and 3 the order of preference of the classes you would like to teach:

-Vocational
-Technical
-Apprenticeship

Q.9 The contents of the syllabus of the subject I teach, in relation to the needs of the students, is:

<u>Technical(U9)</u>	<u>Vocational(U10)</u>	<u>Apprent.(U11)</u>
1.Very relevant	1.Very relevant	1.Very relevant
2.Quite relevant	2.Quite relevant	2.Quite relevant
3.Fairly relevant	3.Fairly relevant	3.Fairly relevant
4.Rather unsuitable	4.Rather unsuitable	4.Rather unsuitable
5.Very unsuitable	5.Very unsuitable	5.Very unsuitable

Q.10 The Technical Schools should aim at providing wide technical education covering a wide range of skills and not narrow specialisation:

<u>Technical(U12)</u>	<u>Vocational(U13)</u>	<u>Apprent.(U14)</u>
1.Strongly agree	1.Strongly agree	1.Strongly agree
2.Agree	2.Agree	2.Agree
3.Uncertain	3.Uncertain	3.Uncertain
4.Disagree	4.Disagree	4.Disagree
5.Strongly disagree	5.Strongly disagree	5.Strongly disagree

Q.11 Under the present circumstances the chances of educational advancement (to institutions of higher learning) are:

<u>Technical(U15)</u>	<u>Vocational(U16)</u>	<u>Apprent.(U17)</u>
1.Very good	1.Very good	1.Very good
2.Good	2.Good	2.Good
3.Moderate	3.Moderate	3.Moderate
4.Few	4.Few	4.Few
5.Non-existent	5.Non-existent	5.Non-existent

Q.12 The books, the teaching materials, and the equipment provided for the teaching of my subject is:

<u>Technical(U18)</u>	<u>Vocational(U19)</u>	<u>Apprent.(U20)</u>
1.Excellent	1.Excellent	1.Excellent
2.Good	2.Good	2.Good
3.Adequate	3.Adequate	3.Adequate
4.Poor	4.Poor	4.Poor
5.Very poor	5.Very poor	5.Very poor

Q13. Workshop skills are better learnt at school than in the industry:

<u>Technical(U21)</u>	<u>Vocational(U22)</u>	<u>Apprent.(U23)</u>
1.Strongly agree	1.Strongly agree	1.Strongly agree
2.Agree	2.Agree	2.Agree
3.Uncertain	3.Uncertain	3.Uncertain
4.Disagree	4.Disagree	4.Disagree
5.Strongly disagree	5.Strongly disagree	5.Strongly disagree

Q14. Technological subjects (technology and technical drawing) are better learnt at school than in industry:

<u>Technical(U24)</u>	<u>Vocational(U25)</u>	<u>Apprent.(U26)</u>
1.Strongly agree	1.Strongly agree	1.Strongly agree
2.Agree	2.Agree	2.Agree
3.Uncertain	3.Uncertain	3.Uncertain
4.Disagree	4.Disagree	4.Disagree
5.Strongly disagree	5.Strongly disagree	5.Strongly disagree

Q15. The behaviour of the students of the cooperative programmes compared to the rest of the students is:

<u>6th Vocational(U27)</u>	<u>Apprenticeship (U28)</u>
1. Far better	1. Far better
2. Better	2. Better
3. About the same	3. About the same
4. Worse	4.worse
5. far worse	5. far worse

Q.16 Compared to the rest of the students how conscientiously do I.T.P. students work?

6th Vocational(U29) Apprenticeship(U30)

- | | |
|--------------|--------------|
| 1. Much more | 1. Much more |
| 2. More | 2. More |
| 3. Same | 3. Same |
| 4. Less | 4. Less |
| 5. Much less | 5. Much less |

Q.17 (U31) The school discipline is:

1. Very strict
2. Strict
3. Appropriate
4. Lax
5. Very lax

Q.18 (U32) Which students, do you think, should wear uniform at school?

1. All students including the apprentices
2. All students except the apprentices
3. All students except the apprentices and the sixth vocational
4. No student
5. Other

Q.19 (U33) The training of new craftsmen is basically the responsibility of the state and not of industry:

1. Strongly agree
2. Agree
3. Uncertain
4. Disagree
5. Strongly disagree

Q.20 (U34) Secondary Technical Education should be part of L.E.M. (Lyceum of elective subjects):

1. Strongly agree
2. Agree
3. Uncertain
4. Disagree
5. Strongly disagree

Q.21 The cooperative programmes should be run in separate training centres and not at the technical schools:

6th Vocational(U35) Apprenticeship(U36)

- | | |
|---------------------|---------------------|
| 1.Strongly agree | 1.Strongly agree |
| 2.Agree | 2.Agree |
| 3.Uncertain | 3.Uncertain |
| 4.Disagree | 4.Disagree |
| 5.Strongly disagree | 5.Strongly disagree |

Q.22 (V37) A programme of work experience in the industry should be offered to the following students: (underline more than one if appropriate)

1. 4th,5th and 6th year Technical
2. 6th Technical
3. 4th,5th and 6th year Vocational
4. 6th Vocational
5. None
6. 6th Vocational and 6th Technical
7. 5th and 6th Vocational
8. All students
9. Other combination

Q.23 (V38) How helpful is the training the students receive at the job site for their future career?

1. Very useful
2. Quite useful
3. Moderately useful
4. A little useful
5. Not at all useful

Q.24 (V39) Industry in general has the personnel and the equipment to offer good training to the students of the Cooperative programmes:

1. Strongly agree
2. Agree
3. Uncertain
4. Disagree
5. Strongly disagree

Q.25 (V40) Instead of the students attending school a certain number of days per week, there are some who say it would be preferable if students were released periodically for a few weeks. What would you prefer?

(Underline which one you prefer)

1. Continue with the present day release programme
2. Introduce a block release programme

Q.26 (V41) There is sufficient dialogue between the Technical School and the industry:

1. Strongly agree
2. Agree
3. Uncertain
4. Disagree
5. Strongly disagree

Q27. Employers should take a more active part in the development of curricula for the Technical Schools:

In my subject(U42) Generally(U43)

- | | |
|----------------------|----------------------|
| 1. Strongly agree | 1. Strongly agree |
| 2. Agree | 2. Agree |
| 3. Uncertain | 3. Uncertain |
| 4. Disagree | 4. Disagree |
| 5. Strongly disagree | 5. Strongly disagree |

Q.28 Employers should take a more active part in the evaluation of Technical Education:

In my subject(U44) Generally(U45)

- | | |
|----------------------|----------------------|
| 1. Strongly agree | 1. Strongly agree |
| 2. Agree | 2. Agree |
| 3. Uncertain | 3. Uncertain |
| 4. Disagree | 4. Disagree |
| 5. Strongly disagree | 5. Strongly disagree |

Q.29 The weight carried by the leaving certificate of the Technical School and of the Apprenticeship Scheme for the purpose of employment and vocational advancement is:

Technical(U46) Vocational(U47) Apprent.(U48)

- | | | |
|--------------------|--------------------|--------------------|
| 1.Very significant | 1.Very significant | 1.Very significant |
| 2.Significant | 2.Significant | 2.Significant |
| 3.Uncertain | 3.Uncertain | 3.Uncertain |
| 4.Insignificant | 4.Insignificant | 4.Insignificant |
| 5.V.insignificant | 5.V.insignificant | 5.V.insignificant |

Q.30 (U49) The Technical School is an efficient institution which makes the best possible use of the facilities and resources available to it:

1. Strongly agree
2. Agree
3. Uncertain
4. Disagree
5. Strongly disagree

Q.31 The support I receive from those responsible to help me solve the special problems associated with the teaching of vocational students and the apprentices is:

Vocational(U50) Apprent.(U51)

- | | |
|----------------|----------------|
| 1. Very strong | 1. Very strong |
| 2. Strong | 2. Strong |
| 3. Fair | 3 Fair |
| 4. Little | 4. Little |
| 5. Very little | 5. Very little |

Q.32 (U52) State the main causes for dissatisfaction of Teachers:

Q.33 The general impression among the public is that the quality of education offered by the Technical School, for the purpose of the educational advancement of its students, is:

<u>Technical(U53)</u>	<u>Vocational(U54)</u>	<u>Apprent.(U55)</u>
1. Very high	1. Very high	1. Very high
2. High	2. High	2. High
3. Satisfactory	3. Satisfactory	3. Satisfactory
4. Low	4. Low	4. Low
5. Very high	5. Very high	5. Very high

Q.34 The general impression among the public is that the Technical School trains people for employment:

<u>Technical(U56)</u>	<u>Vocational(U57)</u>	<u>Apprent.(U58)</u>
1. Very well	1. Very well	1. Very well
2. Well	2. Well	2. Well
3. Satisfactorily	3. Satisfactorily	3. Satisfactorily
4. Badly	4. Badly	4. Badly
5. Very badly	5. Very badly	5. Very badly

RESPONSES

TO QUESTIONNAIRE ON HOW TEACHERS PERCEIVE
COOPERATIVE EDUCATION

U1. Type of teacher:
1. 88 39.9%
2. 138 61.1%

U2. Sex:
1. 178 81.6%
2. 40 18.4%

U3. Age of Teachers:
1. 0 0.0%
2. 6 2.8%
3. 42 19.7%
4. 75 35.2%
5. 44 20.7%
6. 25 11.7%
7. 16 7.5%
8. 5 2.3%
Missing 13

U4. Professional qualifications:
1. 7 3.1%
2. 7 3.1%
3. 3 1.3%
4. 20 8.9%
5. 56 24.9%
6. 102 45.3%
7. 30 13.3%
Missing 1

U5. Pedagogical qualifications:
1. 51 22.9%
2. 137 61.4%
3. 30 13.5%
4. 2 0.9%
Missing 6

U6. Industrial Experience:
1. 30 22.4%
2. 37 27.6%
3. 36 26.9%
4. 16 11.9%
5. 5 3.7%
6. 10 7.5%
Missing 92

(Note: This question was addressed only to Technical Teachers)

U7. Preference to serve (Technical or General schools):

1.	56	65.9%
2.	19	22.4%
3.	4	4.7%
4.	6	7.15%
5.	0	0.0%
Missing	141	

(Note: This question was addressed only to General Teachers)

U8. Preference of classes to teach:

1.	187	84.6%	(Tech.-Voc.-App.)
2.	19	8.6%	(Voc.-Tech.-App.)
3.	6	2.7%	(App.-Voc.-Tech.)
4.	5	2.3%	(Tech.-App.-Voc.)
5.	3	1.4%	(Voc.-App.-Tech.)
6.	0	0.0%	(App.-Tech.-Voc.)
7.	1	0.5%	(Do not mind)
Missing	5		

U9. Appropriateness of syllabus content (Technical):

1.	4	2.1%
2.	56	28.9%
3.	108	55.7%
4.	18	9.3%
5.	8	4.1%
Missing	32	

U10. Appropriateness of syllabus content (Vocational):

1.	4	1.8%
2.	35	15.8%
3.	126	57.0%
4.	40	18.1%
5.	16	7.2%
Missing	5	

U11. Appropriateness of syllabus content (Apprenticeship):

1.	5	2.9%
2.	12	7.1%
3.	81	47.6%
4.	49	28.8%
5.	23	13.5%
Missing	56	

U12. Wide or narrow specialisation (technical):

1.	68	33.3%
2.	89	43.6%
3.	17	8.3%
4.	22	10.8%
5.	8	3.9%
Missing	22	

U13. Wide or narrow specialisation (vocational):

1.	41	18.6%
2.	87	39.5%
3.	13	5.9%
4.	58	26.4%
5.	21	9.5%
Missing	6	

U14. Wide or narrow specialisation (apprenticeship)

1.	23	12.3%
2.	64	30.6%
3.	66	31.6%
4.	42	20.1%
5.	4	1.9%
Missing	39	

U15. Educational advancement (technical):

1.	33	15.8%
2.	64	30.6%
3.	66	31.6%
4.	42	20.1%
5.	4	1.9%
Missing	17	

U16. Educational advancement (vocational):

1.	0	0.0%
2.	18	8.0%
3.	27	12.0%
4.	109	48.4%
5.	71	31.6%
Missing	1	

U17. Educational advancement (apprenticeship):

1.	1	0.5%
2.	3	1.5%
3.	9	4.6%
4.	28	14.4%
5.	153	78.9%
Missing	32	

U18. Adequacy of books etc. (technical):

1.	23	11.8%
2.	61	31.3%
3.	49	25.1%
4.	33	16.9%
5.	29	14.9%
Missing	31	

U19. Adequacy of books etc. (vocational):

1.	18	8.1%
2.	54	24.3%
3.	64	28.8%
4.	44	19.8%
5.	42	18.9%
Missing	4	

Q20. Adequacy of books etc. (apprenticeship):

1.	8	4.3%
2.	33	17.6%
3.	34	18.1%
4.	46	24.5%
5.	66	35.1%
Missing	38	

Q21. Schools v Industry for workshop skills (technical):

1.	33	17.8%
2.	86	46.5%
3.	36	19.5%
4.	27	14.6%
5.	3	1.6%
Missing	41	

Q22. Schools v Industry for workshop skills (vocational):

1.	35	17.2%
2.	87	42.6%
3.	44	21.6%
4.	34	16.7%
5.	4	2.0%
Missing	22	

Q23. Schools v Industry for workshop skills (apprenticeship):

1.	31	17.0%
2.	51	28.0%
3.	43	23.6%
4.	44	24.2%
5.	13	7.1%
Missing	44	

Q24. Schools v Industry for Technological Subjects (technical):

1.	115	58.4%
2.	71	36.0%
3.	9	4.6%
4.	1	0.5%
5.	1	0.5%
Missing	29	

Q25. Schools v Industry for Technological Subjects (vocational):

1.	117	54.7%
2.	83	38.8%
3.	12	5.6%
4.	2	0.9%
5.	0	0.0%
Missing	12	

U26. Schools v Industry for Technological Subjects
(apprent.):

1.	104	54.7%
2.	64	33.7%
3.	11	5.8%
4.	11	5.8%
5.	0	0.0%
Missing	36	

U27. Behaviour of students (vocational):

1.	2	0.9%
2.	5	2.3%
3.	44	20.0%
4.	145	65.9%
5.	24	10.9%
Missing	6	

U28. Behaviour of students (apprent.):

1.	3	1.4%
2.	5	2.4%
3.	38	18.4%
4.	91	44.0%
5.	70	33.8%
Missing	19	

U29. Conscientiousness of students (vocational):

1.	2	0.9%
2.	9	4.2%
3.	33	15.4%
4.	135	63.1%
5.	35	16.4%
Missing	12	

U.30 Conscientiousness of students (apprent.):

1.	4	2.1%
2.	16	8.3%
3.	30	15.5%
4.	103	53.4%
5.	40	20.7%
Missing	33	

U.31 School discipline:

1.	3	1.4%
2.	19	8.6%
3.	150	67.9%
4.	39	17.6%
5.	10	4.5%
Missing	5	

U.32 School uniform:

1.	169	75.4%
2.	18	8.0%
3.	4	1.8%
4.	31	13.8%
5.	2	0.9%
Missing	2	

U.33 State responsibility for training:

1.	73	33.2%
2.	67	30.5%
3.	48	21.8%
4.	29	13.2%
5.	3	1.4%
Missing	6	

U.34 Incorporation of Technical Education into L.E.M. (Lyceum for Elective subjects):

1.	65	29.8%
2.	37	17.0%
3.	36	16.5%
4.	42	19.3%
5.	38	17.4%
Missing	8	

U.35 Separate training centres for vocational:

1.	42	19.0%
2.	49	22.2%
3.	29	13.1%
4.	79	35.7%
5.	22	10.0%
Missing	5	

U.36 Separate Training Centres for Apprent:

1.	73	38.0%
2.	56	29.2%
3.	13	6.8%
4.	38	19.8%
5.	12	6.3%
Missing	34	

U.37 Classes to which I.T.P. should be offered:

1.	3	1.4%
2.	11	5.2%
3.	19	9.0%
4.	37	17.5%
5.	43	20.4%
6.	53	25.1%
7.	15	7.1%
8.	30	14.2%
9.	0	0.0%
Missing	15	

U.38 Usefulness of I.T.P. for future career:

1.	37	16.5%
2.	52	23.2%
3.	90	37.0%
4.	30	13.4%
5.	65	6.7%
Missing	2	

U.39 Capacity of industry to offer good training:

1.	18	8.2%
2.	62	28.3%
3.	73	33.3%
4.	57	26.0%
5.	9	4.1%
Missing	7	

U.40 Day release or block release:

1.	71	36%
2.	128	64%
Missing	26	

U.41 Dialogue between school and industry:

1.	6	2.8%
2.	28	13.3%
3.	107	50.7%
4.	57	27.0%
5.	13	6.2%
Missing	15	

U.42 Participation of employers in curriculum devel.
(my subject):

1.	37	17.7%
2.	75	35.9%
3.	31	14.8%
4.	43	20.6%
5.	23	11.0%
Missing	17	

U.43 Participation of employers in curriculum devel.
(generally):

1.	40	19.6%
2.	88	43.1%
3.	30	14.7%
4.	33	16.2%
5.	13	6.4%
Missing	22	

U.44 Participation of employers in evaluation (my
subject):

1.	25	12.0%
2.	67	32.2%
3.	36	17.3%
4.	50	24.0%
5.	30	14.4%
Missing	18	

U.45 Participation of employers in evaluation of technical education (generally):

1.	21	10.4%
2.	76	37.6%
3.	42	20.8%
4.	41	20.3%
5.	22	10.9%
Missing	24	

U.46 Significance of leaving certificate for employment (technical):

1.	32	15.3%
2.	82	39.2%
3.	74	35.2%
4.	13	6.2%
5.	8	3.8%
Missing	17	

U.47 Significance of leaving certificate for employment (vocational):

1.	14	6.5%
2.	73	33.6%
3.	84	38.7%
4.	35	16.1%
5.	11	5.1%
Missing	9	

U.48 Significance of leaving certificate for employment (apprent.):

1.	13	6.5%
2.	39	19.4%
3.	58	28.9%
4.	48	23.9%
5.	43	21.4%
Missing	25	

U.49 Efficiency of school as an institution:

1.	39	17.6%
2.	107	48.2%
3.	48	21.6%
4.	22	9.9%
5.	6	2.7%
Missing	4	

U.50 Support from school for vocational:

1.	11	5.5%
2.	52	26.0%
3.	63	31.5%
4.	38	19.0%
5.	36	18.0%
Missing	26	

U.51 Support from school for apprent:

1.	6	3.4%
2.	44	25.1%
3.	46	26.3%
4.	42	24.0%
5.	37	21.1%
Missing	51	

U.52 Causes for dissatisfaction:

1.Cooperative students of low standard and not interested.....	66
2.Lack of discipline among cooperative students.....	37
3.Disapproval with way teachers are evaluated and promoted.....	30
4.Inadequate books and material.....	27
5.Timetable not well balanced.....	26
6.Ministry inspectors do not care.....	16
7.Presence of apprentices in school.....	12

U.53 Public impression of quality of education for educational advancement (technical):

1.	16	7.5%
2.	49	23.0%
3.	50	23.5%
4.	83	39.0%
5.	15	7.0%
Missing	13	

U.54 Public impression of quality of education for educational advancement (vocational):

1.	6	2.8%
2.	27	12.5%
3.	47	21.8%
4.	98	45.4%
5.	38	17.6%
Missing	10	

U.55 Public impression for quality of education for educational advancement (apprent.):

1.	4	2.1%
2.	27	13.8%
3.	44	22.6%
4.	68	34.9%
5.	52	26.7%
Missing	31	

U.56 Public impression of quality of education for employment (technical):

1.	23	11.5%
2.	53	26.5%
3.	79	39.5%
4.	42	21.0%
5.	3	1.5%
Missing	26	

U.57 Public impression of quality of education for
employment (vocational):

1.	19	8.9%
2.	61	28.6%
3.	80	37.6%
4.	47	22.1%
5.	6	2.8%
Missing	13	

U.58 Public impression of quality of education for
employment (apprent.):

1.	12	6.3%
2.	43	22.5%
3.	74	38.7%
4.	54	28.3%
5.	8	4.2%
Missing	35	

APPENDIX 1 SECTION 4

QUESTIONNAIRE ON HOW EMPLOYERS PERCEIVE
COOPERATIVE EDUCATION

INTRODUCTION

1. The purpose of this interview is to explore your views on cooperative education (joint programmes between the school and industry).

2. In order to help you answer our questions, we remind you that in the Technical School there are three streams or sections, the Technical stream, the Vocational stream, and the Apprenticeship stream. Students enter all three sections at the same age after completing a three year (12-15) general education programme at the gymnasium.

3. The main characteristics of the three streams are the following:

1. Technical: 3 years full time education at school. Though students are taught both theory and practice, more emphasis is given to the theory part.

2. Vocational: 2 year full time at school. In the final year students spend three days at school and three in industry.

3. Apprenticeship: Throughout the three years students work in industry and they are released for one or two days a week to attend school.

Q.1 (Q1) Characteristics of person being interviewed:

1. Owner
2. Owner and General Manager
3. General Manager
4. Personnel Manager
5. Assistant General Manager
6. Shop Foreman
7. Other (specify)

Q.2 (Q2) Which of the following ways of training would best serve the interests of your firm? Give order of preference:

1. Employ graduates of the Lyceum who, after receiving general education up to the age of 18, go through an accelerated training course at the productivity centre.
2. Employ graduates of the Technical Stream of the Technical School.
3. Cooperate with the Technical Schools in the training of students through the Apprenticeship Scheme.
4. Cooperate with the Technical Schools in the training of students through the Vocational Stream.

5. Employ young people of the age of 15, after they have completed the first cycle of general education and train them in the firm.

Q.3 (U3) I believe that the training of new craftsmen is basically the responsibility of the state and not of industry:

1. Agree absolutely
2. Agree
3. Uncertain
4. Disagree
5. Disagree absolutely

Q.4 (U4) To what degree does public vocational education relieve you of the need to train new craftsmen?

1. To a very great degree
2. To a great degree
3. To a moderate degree
4. To a small degree
5. Not at all

Q.5 The number of days students attend school should:

For 6th Vocational (U5)

1. Be increased
2. Stay the same
3. Be reduced

For Apprenticeship (U6)

1. Be increased
2. Stay the same
3. Be reduced.

Q.6 (U7) Does the absence of cooperative students from work during the days they are at school create problems for you?

1. Great
2. Quite a lot
3. Moderate
4. Few
5. None

Q.7 (U8) Please rate on a scale of 1-5 (one the lowest, five the highest) the general standard of your I.T.P.students in the following fields:

1. Basic skills (literacy etc.)
2. Job skills
3. Technical knowledge
4. Productivity
5. Ability to work without constant supervision
6. Willingness
7. Punctuality
8. Cooperation with co-workers

Q.8 (U9) Do you provide a specially planned training programme to I.T.P.students who are under training in your firm?

1. Always
2. Sometimes
3. Never

Q.9 Do you have any problems in finding workers?

Trainees(V10)

1. Many
2. Considerable
3. Moderate
4. Few
5. None

Craftsmen(V11)

1. Many
2. Considerable
3. Moderate
4. Few
5. None

Q.10 What weight does the leaving diploma of the Technical School carry in your firm for the purpose of initial employment?

Vocational(V12)

1. Very great
2. Great
3. Moderate
4. Little
5. None

Apprenticeship(V13)

1. Very great
2. Great
3. Moderate
4. Little
5. None

Q.11 How important is the Leaving Diploma for Vocational Advancement?

Vocational(V14)

1. Very important
2. Quite important
3. Moderately important
4. Little important
5. Not at all important
5. Not at all important

Apprenticeship(V15)

1. Very important
2. Quite important
3. Moderately important
4. Little important

Q.12 (V16) Should technical schools aim at providing a wide range of skills covering many allied trades, or a narrower specialisation mainly in one trade?

1. Wide specialisation
2. Narrow specialisation

Q.13 (V17) How relevant do you find the training offered in the technical schools?

1. Very relevant
2. Quite relevant
3. Moderately relevant
4. Little relevant
5. Not at all relevant

Q.14 (18) What changes should be made in the programme of the schools concerning the number of periods the various subjects are taught?

1. More emphasis should be given to technical subjects and technical skill acquisition
2. More emphasis should be given to the development of basic skills in literacy and numeracy
3. The programme is satisfactory and should not be altered

Q.15 (V19) To which degree do you think employers influence the curriculum?

1. Very great
2. Great
3. Moderate
4. Small
5. None at all

Q.16 (V20) How do you find the quality of work carried out in the technical schools?

1. Very high
2. High
3. Fair
4. Low
5. Very low

RESPONSES TO EMPLOYERS' QUESTIONNAIRE

U1. Characteristics of the person interviewed:

1.	47	39.2%
2.	51	42.5%
3.	3	2.5%
4.	5	4.2%
5.	1	0.8%
6.	13	10.8%
7. Other	0	0.0%
Missing	0	

U2. Rank order of preference of training programmes:

	1	2	3	4	5	TOTAL
A	31	19	11	31	28	120
B	21	29	30	33	7	120
PROG.C	25	33	48	8	6	120
D	40	36	20	24	0	120
E	3	3	11	24	79	120
TOTAL	120	120	120	120	120	

U3. State responsibility for training:

1.	43	35.8%
2.	44	36.7%
3.	9	7.5%
4.	20	16.7%
5.	4	3.3%
Missing	0	

U4. Contribution to the needs for new craftsmen:

1.	9	7.5%
2.	30	25.0%
3.	48	40.0%
4.	26	21.7%
5.	7	5.8%
Missing	0	

U5. Days apprentices attend school:

1.	25	20.8%
2.	69	57.5%
3.	26	21.7%
Missing	0	

U6. Days apprentices attend school:

1.	19	15.8%
2.	96	80.0%
3.	5	4.2%
Missing	0	

U7. Difficulties because of the absence of students:

1.	10	8.3%
2.	17	14.25%
3.	38	31.75%
4.	43	35.8%
5.	12	10.0%
Missing	0	

U8. Job performance satisfaction:

	1	2	3	4	5
1	2%	24%	52%	18%	4%
2	0	20	56	22	2
3	2	25	42	26	5
4	3	53	21	23	0
5	18	35	32	11	4
6	0	0	19	42	39
7	0	0	5	32	63
8	0	0	20	42	38

U9. Special training programme:

1.	38	31.5%
2.	11	9.0%
3.	71	59.5%
Missing	0	

U10. Problems in finding trainees:

1.	34	28.3%
2.	35	29.2%
3.	26	21.7%
4.	8	6.7%
5.	17	14.2%
Missing	0	

U11. Problems in finding craftsmen:

1.	39	32.5%
2.	24	20.0%
3.	24	20.0%
4.	16	13.3%
5.	17	14.1%
Missing	0	

U12. Significance of voc. leaving diploma for initial employment:

1.	12	10.0%
2.	21	17.5%
3.	27	22.5%
4.	41	34.2%
5.	19	15.8%
Missing	0	

U13. Significance of appr. leaving diploma for initial employment:

1.	21	17.5%
2.	25	20.8%
3.	35	29.1%
4.	26	21.7%
5.	13	10.8%
Missing	-	

U14. Significance of voc. leaving diploma for vocational advancement:

1.	24	20.0%
2.	35	29.2%
3.	29	24.2%
4.	21	17.5%
5.	11	9.2%
Missing	0	

U15. Significance of appr. leaving diploma for vocational advancement:

1.	20	16.7%
2.	25	20.8%
3.	36	30.0%
4.	26	21.7%
5.	13	10.8%
Missing	0	

U16. Range of skills:

1.	82	68.6%
2.	38	31.4%
Missing	0	

U17. Relevance of training:

1.	17	14.2%
2.	60	50.0%
3.	38	31.7%
4.	4	3.3%
5.	1	0.8%
Missing	120	

U18. Changes in the programme:

1.	95	83.3%
2.	10	7.9%
3.	5	8.8%
Missing	0	

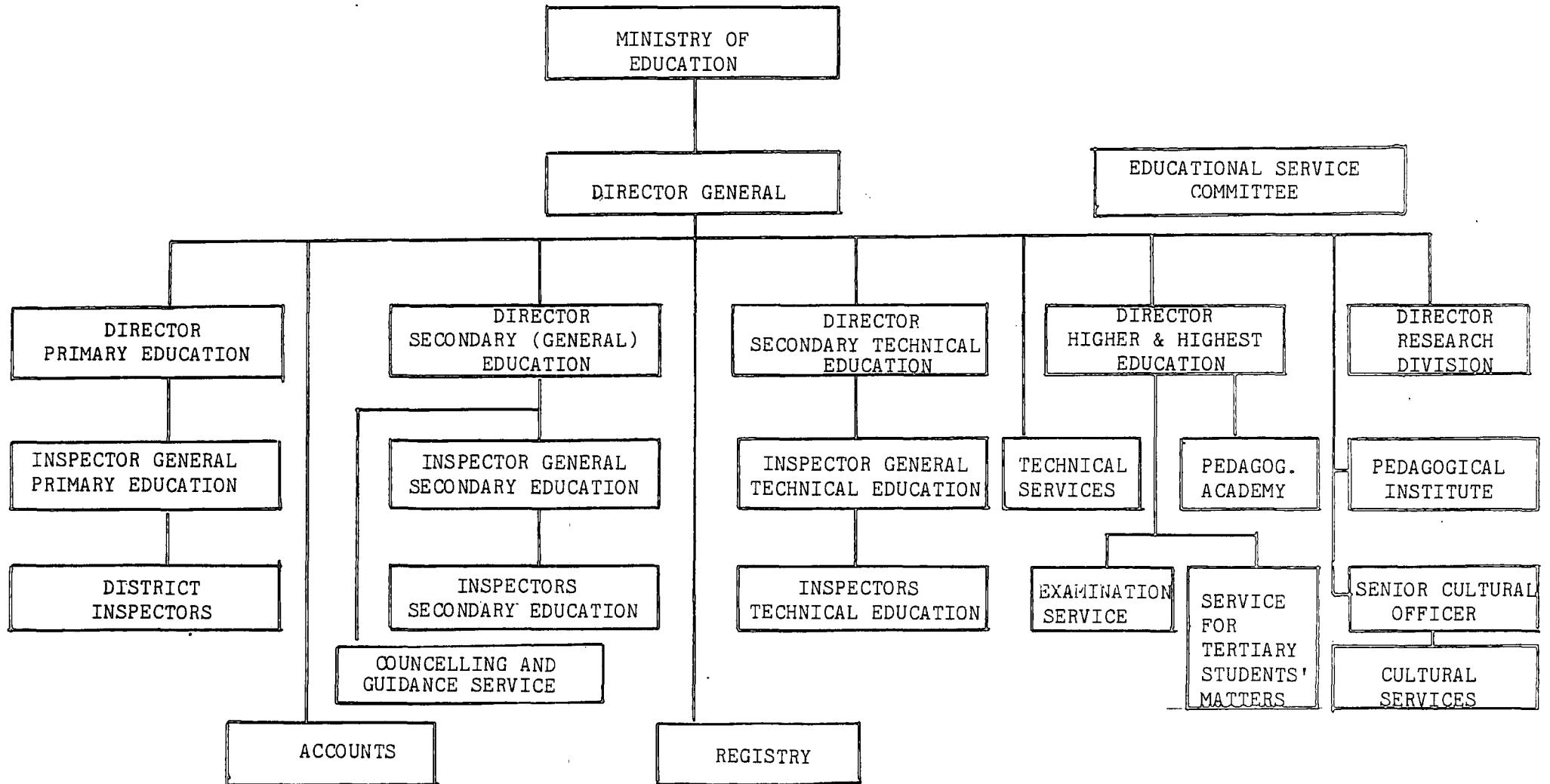
U19. Employers' influence on curriculum:

1.	5	4.2%
2.	18	15.0%
3.	26	21.7%
4.	25	20.8%
5.	46	38.3%

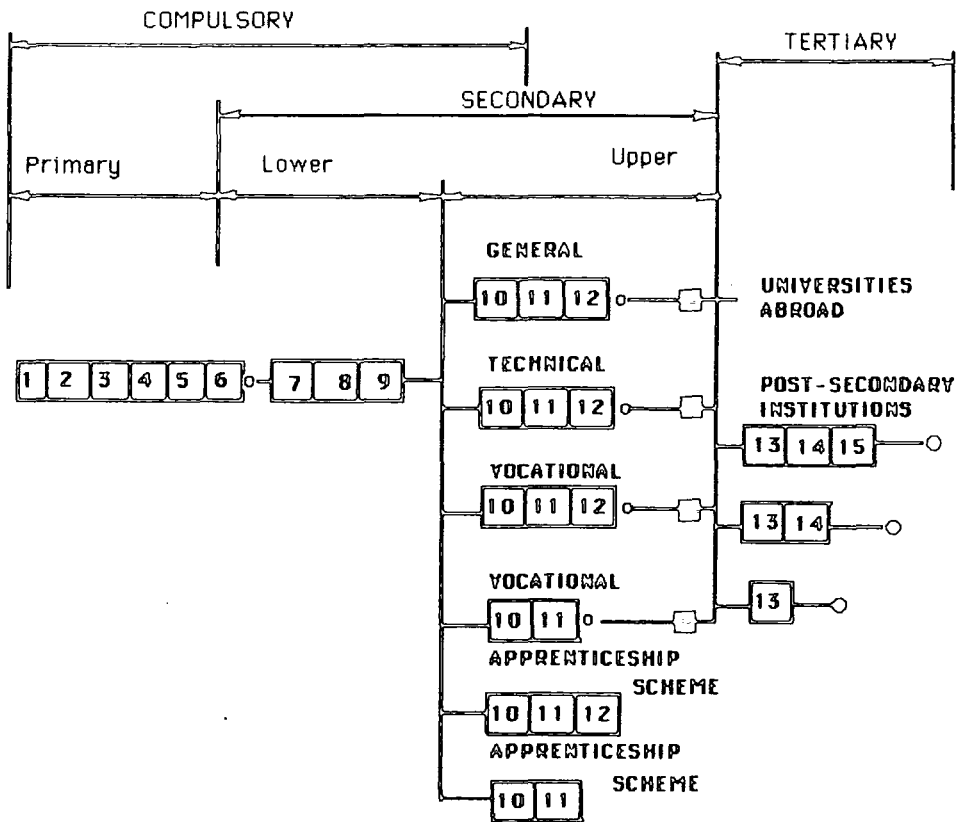
U20. Technical school work quality:

1.	8	6.7%
2.	43	35.8%
3.	64	53.3%
4.	3	2.5%
5.	2	1.7%

ORGANIZATION STRUCTURE OF MINISTRY OF EDUCATION



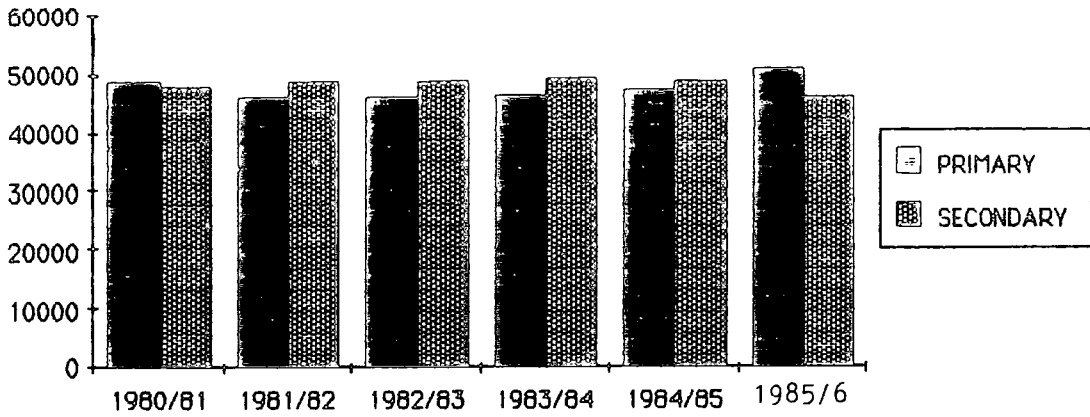
STRUCTURE OF TECHNICAL AND VOCATIONAL EDUCATION
IN THE EDUCATIONAL SYSTEM OF CYPRUS



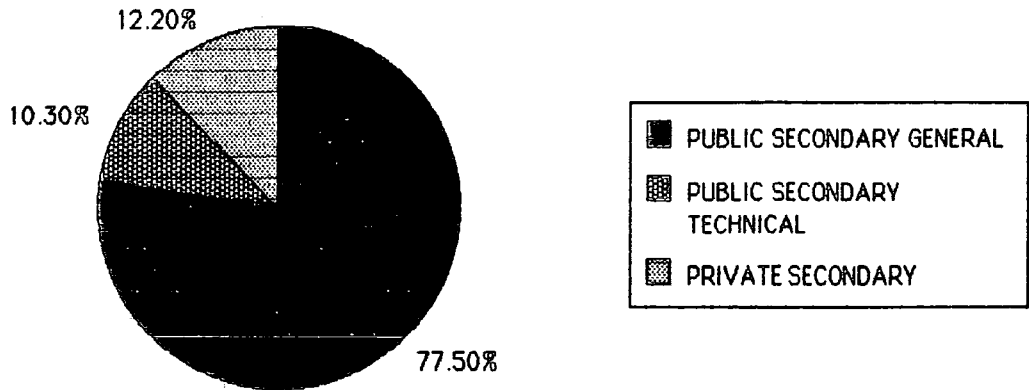
- Entrance Examinations
- School Leaving Certificate (APOLYTIRION)
- National Diploma

APPENDIX 3.1

ENROLMENT IN PRIMARY AND SECONDARY SCHOOLS
FROM 1980/81 TO 1985/86



ENROLMENT AT THE SECOND LEVEL
BY STATUS OF SCHOOL 1985/86



Source: EDUCATIONAL STATISTICS 1985/86. Ministry of Finance

APPENDIX 3: STUDENT ENROLMENT AND SPECIALISATION

TABLE 1: Second Cycle Students by Type of Education, 1980-1986

Type of education		80-81	81-82	82-83	83-84	84-85	85-86
Classical	No.	2,211	1,125	311	-	-	-
	%	10.2	5.1	1.4	-	-	-
Commercial/ Secretarial	No.	4,112	2,195	736	45	64	-
	%	19.0	10.0	3.3	0.2	0.3	-
Science	No.	3,174	1,596	316	-	-	-
	%	14.6	7.3	1.4	-	-	-
Technical	No.	934	953	1,017	1,034	1,180	1,115
	%	4.3	4.4	4.6	4.6	5.0	4.8
Vocational	No.	2,823	2,658	2,637	2,641	2,736	2,886
	%	13.0	12.1	11.9	11.6	11.5	12.4
General Studies	No.	554	892	1,120	1,213	1,390	1,562
	%	2.6	4.1	5.0	5.3	5.8	6.7
LEM-General	No.	7,867	2,008	-	-	-	-
	%	36.3	9.2	-	-	-	-
LEM-S1	No.	-	1,008	1,389	1,475	1,227	1,195
	%	-	4.6	6.2	6.5	5.2	5.1
LEM-S2(a)	No.	2,732	3,688	3,907	3,870	3,509	-
	%	-	12.5	16.6	17.2	16.3	15.0
LEM-S2(b)	No.	429	999	711	600	479	-
	%	2.0	4.5	3.1	2.5	2.1	-
LEM-S3	No.	-	1,495	2,607	3,419	4,251	4,430
	%	-	6.8	11.7	15.0	17.8	19.0
LEM-S4(a)	No.	-	2,480	4,245	4,892	5,585	5,568
	%	-	11.3	19.1	21.5	23.4	23.8
LEM-S4(b)	No.	-	1,891	2,447	2,414	1,651	1,288
	%	-	8.6	11.0	10.6	6.9	5.5
LEM-S5	No.	-	431	738	991	1,263	1,316
	%	-	2.0	3.3	4.4	5.3	5.6
All types of education	No.	21675	21893	22250	22742	23817	23356
	%	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 2: Pupils in 2nd cycle by grade, sex and specialisation.

Specialisation	Grade IV		Grade V		Grade VI		All grades		
	M	F	M	F	M	F	M	F	M+F
Technical Department									
Mechanics	14	-	59	1	46	-	145	1	146
Auto Mechanics	14	-	49	1	38	-	101	1	102
Elect. Technicians	46	-	78	1	84	-	208	3	211
Elec. Installations	101	-	79	-	64	-	244	-	244
Elect. Computers	22	6	42	9	23	3	87	18	105
Construct. Works	54	15	59	30	62	29	175	74	249
Graphic Arts	13	34	-	11	-	-	13	45	58
Total Technical	290	55	366	53	317	34	973	142	1115
Vocational Department									
Machinist-Fitters	80	-	75	-	58	-	213	-	213
Auto. Mechanics	139	-	138	-	72	-	349	-	349
Sheet-Met. Welders	31	-	18	-	13	-	62	-	62
Plumbers Welders	62	-	54	-	41	-	157	-	157
Elec. Installations	111	-	138	-	113	-	362	-	362
Domestic Appliances	74	-	85	-	68	-	227	-	227
Elect. Technicians	82	-	58	-	45	-	185	-	185
Carpenters	139	-	122	-	106	-	367	-	367
Builders	49	-	56	-	31	-	136	-	136
Draftsmen	36	20	33	17	19	19	88	56	144
Dress-makers	-	126	-	108	-	-	-	234	234
Hotel/Catering	62	7	-	-	-	-	62	7	69
Waiters	41	3	44	8	-	-	85	11	96
Cooks	-	-	49	-	-	-	49	-	49
Total Vocational	906	156	870	133	566	19	2342	308	2650
GRAND TOTAL	1196	211	1236	186	883	53	3315	450	3765

Source: Educational Statistics 1985-86, Department of Statistics, Ministry of Finance.

TABLE 3: Number of Apprentices by Trade in October 1985.

Specialisation	1st year		2nd year		3rd year		Total
	M	F	M	F	M	F		M+F
Automechanics	69	-	53	-	57	-	179
Builders	71	-	35	-	27	-	133
Dress Making	-	47	-	45	-	-	92
Electricians	-	-	12	-	23	-	35
Furniture Makers	24	-	20	-	-	-	44
Furnit. Makers/Carpenters	88	-	39	-	44	-	171
Plumbers	-	-	6	-	4	-	10
Sh.Metal Workers/Welders	30	-	25	-	23	-	78
Welders/Plumbers/Turners	30	-	27	-	15	-	72
Fitters/Turners	15	-	8	-	7	-	30
Goldsmiths/Silversmiths	29	3	6	7	-	-	45
Carpenters	-	-	10	-	9	-	19
Automobile Electricians	46	-	18	-	8	-	72
Hotel and Catering	-	-	-	-	-	-	-
ALL SPECIALISATIONS	402	50	259	52	217	-	980

Source: Education Statistics 1985-1986, Department of Statistics, Ministry of Finance.

APPENDIX 4 - DEVELOPMENT OF TECHNICAL EDUCATION

1. List of Technical Schools and Year of Establishment

1.1 Before Independence

Technical School, Nicosia	1957
Technical School, Limassol	1957

1.2 After Independence

Technical School Xeros	1961
Technical School Larnaca("Dianellios")	1962
Technical School Polis	1963
Technical School Famagusta	1963
Technical School Paphos	1969
Technical School Nicosia "Ayios Kassianos"	1973
Technical School B Limassol	1976
Technical School Larnaca "Ayios Lazaros"	1980
Technical School Nicosia("Makarios III")	1981

Note: As a result of the 1974 Turkish Invasion of the island, Technical School Xeros and Technical School Famagusta are now in the Turkish occupied part of the island.

APPENDIX 4 (Continued)

2. Comparative Table of Students, Teachers and Pupil-Teacher ratios in the Technical Schools between 1960-1986

School Year	Students(1)	Teachers	St/Teacher Ratio(2)	Apprent.
61-62	1292	93	13.9	-
62-63	1865	125	14.9	-
63-64	2582	176	14.7	54
64-65	2876	175	16.4	152
65-66	3282	178	18.4	209
66-67	3809	202	18.9	259
67-68	4089	226	18.1	562
68-69	4289	258	16.6	561
69-70	4154	261	15.9	672
70-71	4379	288	15.2	898
71-72	4640	324	14.3	1089
72-73	4198	296	14.2	1028
73-74	4672	338	13.8	1115
74-75	5763	357	16.1	480(3)
75-76	6112	381	16.0	880
76-77	6574	442	14.9	979
77-78	6723	475	14.2	1231
78-79	6445	504	12.8	1289
79-80	5840	511	11.4	1350
80-81	5805	502	11.6	1367
81-82	5543	495	11.2	1276
82-83	5527	510	10.8	1158
83-84	5196	487	10.7	1052
84-85	5286	484	10.9	964
85-86	4852	454	10.7	980

(1) Includes both first and second cycle (technical and vocational).

(2) The figures refer to pupil/teacher ratio for technical and vocational classes.

(3) Sudden drop due to Turkish invasion of the island.

APPENDIX 5

CURRICULUM

1. ALLOCATION OF PERIODS BETWEEN GENERAL AND TECHNICAL SUBJECTS 1960-1986

A Period 1960-1964

(Students entered at the age of 12 from Primary School)

	4 Year Vocational		6 year Technical	
	General Subjects	Technical Subjects	General Subjects	Technical Subjects
Grade 1 _____	67%	33%	89%	11%
2 _____	50%	50%	89%	11%
3 _____	47%	53%	64%	36%
4 _____	28%	72%	32%	68%
5 _____			33%	67%
6 _____			36%	64%

B Period 1964-1967

(Students entered at the age of 12 from Primary School)

	5-Year Vocational		6 Year Technical	
	General Subjects	Technical Subjects	General Subjects	Technical Subjects
Grade 1 _____	73%	27%	90%	10%
2 _____	63%	37%	90%	10%
3 _____	50%	50%	73%	27%
4 _____	43%	57%	43%	57%
5 _____	43%	57%	43%	57%
6 _____			36%	64%

Appendix 5 (Continued)

C Period 1967-1972

(Students entered the 4th grade at the age of 15, after completing their first three years in a secondary general education school - gymnasium)

	5 Year Vocational		6 Year Technical	
	General Subjects	Technical Subjects	General Subjects	Technical Subjects
Grade 4 _____	40%	60%	67%	33%
5 _____	40%	60%	52%	48%
6 _____			37%	63%

D Period 1972-1978

(Students entered the 4th grade at the age of 15, after completing their first three years in a secondary general education school- gymnasium)

	6 Year Common Programme	
	General Subjects	Technical Subjects
Grade 4 _____	50%	50%
5 _____	47%	53%
6 _____	42%	58%

E Period 1978 to date(1986)

(Students entered the 4th grade at the age of 15, after completing their first three years in a secondary general education school - gymnasium)

	6 Year Vocational		6 Year Technical	
	General	Technical	General	Technical
Grade 4 _____	42.5%	57.5%	55%	45%
5 _____	42.5%	57.5%	57%	43%
6 _____	22.5%	* 27.5%	57%	43%

(* Supplemented 50% Industrial Training-3 days a week)

Appendix 5 (Continued)

2. CURRENT TYPICAL TIMETABLE IN PERIODS PER WEEK

(Technical and Vocational)

Subject	Technical All Grades	Vocational Grades 4,5	Grade 6
<u>General Subjects</u>			
Religious Instruction	1	1	-
Greek	4	3	2
English	4	3	2
History	1	1	-
Physical Education	2	2	-
Mathematics	6	4	3
Physics-Chemistry	5	3	2
<u>Technical Subjects</u>			
Technical Drawing	3	3	5
Technology	6	4	3
Workshops	8	16	3
Industrial Training	-	-	20
Total	<u>40</u>	<u>40</u>	<u>40</u>

3. CURRENT TYPICAL TIMETABLE IN PERIODS PER WEEK

(Apprenticeship)

Subject	Grade 1	Grade 2	Grade 3
<u>General Subjects</u>			
Greek	1	1	2
Mathematics	1	1	2
English	1	1	2
<u>Technical Subjects</u>			
Technology	2	2	3
Technical Drawing	2	2	3
Workshops	3	3	4
Total	<u>10</u>	<u>10</u>	<u>16</u>

NOTE: Apprentices attend school one day a week in the first and second grades, and two days a week in their third grade.

4. TIMETABLE IN PERIODS PER WEEK FOR GENERAL EDUCATION
SECONDARY SCHOOLS

4.1 GYMNASIUM

(First cycle of secondary general education-Grade 1 to 3)

Subject	Grade 1	Grade 2	Grade 3
1. Religious Education	2	2	2
2. Modern Greek	5	5	5
3. Classical Greek Language and Literature	3	4	4
4. Mathematics	4	4	4
5. History	3	2	2
6. Civics	-	-	1/2
7. Vocational Guidance	-	-	1/2
8. Geography	1	1	1
9. Science	3	4	4
10. English	4	4	4
11. French	-	-	2
12. Physical Training	3	3	3
13. Art	2	2	1
14. Music	2	2	1
15. Home Economics (for girls) Practical Technology (for boys)	3	3	2
	35	36	36

4.2 LYCEUM OF ELECTIVE SUBJECTS

(Second cycle of secondary general education-Grade 4 to 6)

A. Subjects of the Main Core (Compulsory Subjects)

Subject	Grade 4	Grade 5	Grade 6
1. Religious Education	2	2	2
2. Modern Greek	4	4	4
3. Civics	-	1	-
4. Biology	1	-	-
5. Music	1	-	-
6. Art	1	-	-
7. Physical Training	2	2	2
8. Classical Greek Language and Literature	3	3	3
9. History	2	2	2
10. Mathematics	3	3	3
11. Physics-Chemistry	2	2	2
12. English	4	4	4
13. French	2	2	2
14. Home Economics	1	1	1
	28	24	24

Appendix 5 (Continued)

B. Specialisation Subjects (Optional Subjects)

Classical Greek
Latin/History/Philosophy
Mathematics
Physics
Chemistry
Foreign Language (English or French or German)
Economics, Book-Keeping
Political Economy, Office Training
Typing
Social Studies

The pupil must choose such a combination from the above specialisation subjects as to put enough emphasis on a specific area of specialisation. The time allotted to the chosen specialisation subjects must amount to 9 periods per week for grade 4, and 11 periods per week for grades 5 and 6.

APPENDIX 6

THE CYPRUS ECONOMY IN FIGURES

	1973 ⁽¹⁾	1983	1984	1985
Area 9,251 sq.km (3,573 sq.mls)				
Population in government controlled area (end of year estimate)..... '000s	638.0	527.6	534.8	544.0 ⁽²⁾
NATIONAL ACCOUNTS STATISTICS				
Gross National Product at constant market prices-change over previous year.....%	2.6	3.9	7.5	3.7
GNP at current prices.....C£ million				
ORIGIN⁽³⁾				
Agriculture, forestry, fishing and hunting.....	41.1	89.8	119.6	105.9
Mining and quarrying.....	11.6	8.0	8.0	7.9
Manufacturing.....	43.3	184.8	211.4	227.2
Electricity, gas and water.....	5.6	22.1	27.6	32.0
Construction.....	36.7	122.3	135.1	145.5
Trade, restaurants and hotels...	62.0	189.4	233.8	258.8
Transport, storage and communication.....	20.8	100.6	117.8	134.4
Finance, insurance, real estate and business services.....	44.1	156.0	178.4	192.5
Community, social and personal services.....	26.2	43.6	52.6	57.9
Total industries.....	291.4	916.6	1084.3	1162.1
Producers of government services.....	18.9 ⁽⁴⁾	150.9	166.5	184.7
Other producers.....	-	5.0	6.2	7.0
Sub-Total.....	310.3	1072.5	1257.0	1353.8
Less imputed bank service charge.....	-	31.7	36.1	36.0
Plus: import duties.....	-	83.3	94.8	105.2
Indirect taxes less subsidies..	19.1		not applicable	
GDP at market prices.....	329.4	1124.1	1315.7	1423.0
Net factor income from abroad..	11.1	21.8	24.7	26.1
GNP at current market prices...	340.5	1145.9	1340.4	1449.1
USE				
Private final consumption expenditure.....	238.4	185.9	205.0	224.8
General government final consumption expenditure.....	35.8	739.2	824.8	896.3
Capital formation.....	94.3	318.8	409.8	405.3
Changes in stocks.....	5.4	24.8	27.8	31.0
Exports of goods and services..	131.6	573.0	730.5	737.9
Less imports of goods and services.....	176.1	727.2	897.4	879.4

	1973	1983	1984	1985
Statistical discrepancy.....	-	9.6	25.2	7.1
GDP at current market prices...	329.4	1124.1	1315.7	1423.0
Net factor income from abroad..	11.1	21.8	24.7	26.1
GNP at current market prices...	340.5	1145.9	1340.4	1449.1
PRODUCTION				
ENERGY				
Production of electricity.....million kwh	830	1,222	1,250	1,319
AGRICULTURE				
Potatoes.....'000 tons	160	188	185	125
Citrus fruit ⁽⁵⁾'000 tons	298	125	147	146
Grapes.....'000 tons	95	210	199	207
Carrots.....'000 tons	12.0	6.0	6.2	5.7
MINING AND QUARRYING				
Copper ⁽⁶⁾'000 tonnes	564	48.8	25.7	71.7
Sand, gravel and road aggregate.....'000 tonnes	4,640	4,100	4,075	3,850
Havara.....'000 tonnes	823	4,505	3,560	2,800
MANUFACTURING				
Cement.....'000 tonnes	451	944	853	659
Clothing(exports).....C£'000s	2,035	38,247	61,833	49,623
Footwear.....'000 pairs	2,008	6,741	7,296	7,311
Cigarettes.....million	972	2,878	2,586	2,366
Wine products...million litres	46	45	44	39
TOURISM				
Tourist arrivals.....'000s	264	621	737	814
Excursionists.....'000s	n.a.	95	89	108
Residents visiting foreign countries ⁽⁷⁾'000s	67	113	129	131
Hotel capacity.....no. of beds	14,296	22,998	25,670	28,956
Foreign exchange receipts from tourism.....C£ million	23.8	174.8	212	245
TRANSPORT				
Private cars licensed.....'000s	74.7	106.6	114.0	121.0
Buses, lorries, taxis and self-drive cars licensed.'000s	20.5	41.4	46.2	51.1
Public roads ⁽⁸⁾miles	5,816	7,016	7,151	n.y.a.
Aircraft landings.....number	7,365	11,402	11,943	14,193
Ship arrivals.....number	3,035	4,831	5,720	4,793
LABOUR				
Economically active population.....'000s	279.7	240.6	243.2	n.y.a.
Registered unemployment..number	3,314	7,772	7,957	8,300
Unemployment rate.....%	1.2	3.2	3.3	3.4
Index of average rates of pay.....Oct.1973=100				
Money terms.....	100	446	486	534
Real terms.....	100	200	205	215

	1983	1984	1985	1986
PRICES				
General Retail Price				
Index ⁽⁹⁾Jan-Dec 1981=100	51.4	113.9	123.2	125.5
Food and drinks.....	n.a.	114.8	131.6	128.0
Rent and housing.....	n.a.	110.4	117.7	123.3
Fuel and light.....	n.a.	122.3	130.3	120.6
Clothing and footwear.....	n.a.	119.4	128.5	135.9
Other ⁽¹⁰⁾(11).....	n.a.	112.6	118.0	122.6
Wholesale price index.1982=100	n.a.	103.4	108.8	112.3
FOREIGN TRANSACTIONS				
Foreign trade.....Cf million				
Total exports f.o.b.....	60.5			
260.5	336.5	290.6		
Domestic exports f.o.b.....	51.4	189.0	244.3	210.7
Re-exports f.o.b.....	9.1	71.5	92.5	79.9
Imports c.i.f.....	157.4	642.0	796.5	762.3
Main export products..Cf million				
Potatoes.....	5.9	12.4	30.2	10.4
Citrus.....	16.2	13.5	14.3	18.3
Grapes (fresh).....	1.0	3.5	4.4	4.3
Wines.....	4.5	9.2	10.2	7.7
Cement.....	0.1	10.2	7.0	13.4
Clothing.....	2.0	38.4	49.7	61.9
Footwear.....	0.6	15.8	17.7	16.7
Cigarettes.....	-	6.0	4.6	4.8
Minerals.....	9.8	4.3	2.2	2.2
	1973	1983	1984	1985
Imports by economic destination.....Cf million				
Consumer goods.....	48.7	102.0	103.4	116.2
Intermediate inputs.....	70.3	248.8	292.4	291.5
Capital goods.....	27.7	49.7	61.6	64.1
Transport equipment and parts thereof ⁽¹²⁾	n.a.	51.5	109.3	88.7
Fuels and lubricants.....	8.7	115.0	131.9	114.1
Unclassified.....	2.0	0.6	0.7	0.6
Domestic exports				
volume index.....1973=100	100.0	176.4	207.0	183.3
Imports volume index...1973=100	100.0	175.4	185.6	185.2
Trading partners.....Cf million				
EXPORTS				
United Kingdom.....	24.2	42.8	57.3	47.0
Other EEC countries.....	12.3	29.0	35.7	33.3
Eastern trading area.....	8.9	16.3	15.7	16.0
Arab countries.....	5.0	124.4	169.4	140.0
North America.....	0.9	6.4	11.6	6.5
Other.....	9.2	10.9	17.0	11.8

	1983	1984	1985	1986
IMPORTS				
United Kingdom.....	39.2	87.0	96.3	103.5
Other EEC countries.....	47.7	231.2	328.1	331.7
Eastern trading area.....	10.2	38.2	63.0	39.1
Arab countries.....	9.1	71.7	80.4	77.4
North America.....	12.7	46.0	46.6	34.5
Other.....	38.5	167.9	182.0	176.1
Balance of payments...C£ million				
Exports f.o.b.....	57.2	230.7	307.5	255.0
Imports f.o.b.....	-140.5	-575.9	-720.7	-687.0
TRADE BALANCE.....	-83.3	-345.2	-413.2	-432.0
Invisible receipts.....	97.4	454.6	534.6	602.0
Invisible payments.....	-42.3	-236.0	-238.1	-270.0
INVISIBLE BALANCE.....	55.1	251.0	296.5	332.0
CURRENT ACCOUNT BALANCE.....	-28.2	-94.2	-116.7	-100.0
Net capital movement.....	24.3	86.8	130.3	77.0
Net errors and omissions.....	-0.6	10.2	14.6	5.0
OVERALL BALANCE (Surplus+/deficit-).....	-4.5	+2.8	+28.2	-18.0
Cyprus foreign exchange reserves.....C£ million				
Central Bank (13).....	104.7	295.3	352.4	327.9
Government.....	0.3	0.5	0.5	0.8
Reserve position in IMF.....	2.7	2.7	3.0	2.8
Deposit money banks.....	4.6	30.5	45.6	58.0
Total.....	112.3	328.8	401.5	389.5
Exchange rates (foreign currency per C£)(14)				
£ (period average).....	1.17 ⁽¹⁵⁾	1.28	1.28	1.27
\$ (period average).....	2.86 ⁽¹⁵⁾	1.90	1.70	1.64
SDR (end of period).....	2.30	1.72	1.58	1.68
Bank of Cyprus Index for C£ (end of period)(16)...Jan-Dec 1981=100				
	-	97.8	102.6	103.1
GOVERNMENT FINANCE				
Government receipts...C£ million	60.4	289.4	344.4	389.4
of which: Direct taxes.....	12.5	64.9	84.3	98.2
Indirect taxes.....	31.8	110.2	131.5	145.8
Government expenditure.....	-71.6	-357.3	-409.5	-453.0
of which: Current expenditure...	-60.9	-306.2	-352.0	-392.5
Capital expenditure...	-9.2	-51.2	-57.6	-60.5
Net lending.....	-2.2	-10.4	-8.8	-11.9
Budget surplus(+)/Deficit(-)....	-13.4	-78.3	-73.9	-75.5
Public debt.....C£ million	33.6	405.8	549.0	594.6
Local (17).....	13.5	49.0	63.8	92.7
Foreign (18).....	20.1	356.8	485.2	501.9
MONEY AND BANKING				
Money supply.....C£ million				
Currency held by the public....	29.7	115.9	122.2	127.9

	1983	1984	1985	1986
Money supply(M1).....	62.6	248.6	259.9	285.6
Total liquidity(M2).....	197.8	791.1	899.4	992.3
Bank credit.....	146.1	603.0	680.7	785.8
Liquidity ration of banks.....%	27.7	25.1	26.9	25.8
Interest rates.....%				
Deposit rates.....	2.8	2.7	2.7	2.7
Lending rate.....	9	9	9	9
Treasury bill rate.....	5.5	5.5	5.5	5.5
Central Bank discount rate.....	6	6	6	6
Government bonds.....	7.5	8	8	8
QUALITY OF LIFE				
GNP per capita(current prices)in government controlled area...C£	547	2172	2506	2664
Working population as a % of the total population.....	43.3	45.6	45.5	45.3
Number of inhabitants per sq.km.	69	89	90	92
Crude birth rate/1000 population.....number	18.3	20.7	20.5	18.9
Crude death rate/1000 population.....	9.5	8.5	8.0	8.8
Persons/doctor.....	1139	712	671	n.y.a.
Persons/dentist.....	3493	2377	2285	n.y.a.
Persons/hospital bed. ⁽¹⁹⁾	157	148	149	n.y.a.
Dwellings constructed. ⁽²⁰⁾	4530	7287	6327	6000
Telephones/100 population. ⁽²¹⁾ ...	7	19	22	25
Passenger cars/100 population...	118	202	213	222

NOTES:

1. The year before the Turkish invasion. 2. Figures given are provisional. 3. Figures for GDP by economic activity for 1973 are valued at factor cost. 4. Public administration and defence only. All other activities of government are included in the corresponding industries. 5. Oranges, lemons, grapefruit, tangerines. 6. Copper concentrates, copper precipitates, flotation pyrites. 7. Excluding students studying abroad. 8. Bituminous and gravel road surface. 9. End-of-year figure. 10. Includes the categories of household equipment, household operations and miscellaneous. 11. Figures given are the average for the year. 12. New category included since 1980. 13. Includes holdings of SDRs. 14. Value of C£ maintained against a basket of currencies. 15. Par values. 16. Trade-weighted index. 17 Excludes floating debt in the form of Treasury bills. 18. Includes borrowing from the IMF and foreign debt of public corporations. 19. Beds in both private and public hospitals and clinics. 20. Includes private sector, government low cost housing and self-housing schemes. 21. Number of exchange lines in the government controlled area.

APPENDIX 7

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