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Adult Education  
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**AN ASSESSMENT OF THE IMPACT OF INDUSTRIAL ARTS -  
IN MONZE DISTRICT URBAN SCHOOLS FROM 1983-1993.**

**BY**

**NDOPU M. ROBERT**

**A RESEARCH PROJECT SUBMITTED FOR A DISSERTATION IN  
PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE DIPLOMA  
IN ADULT EDUCATION**

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CENTRE FOR CONTINUING EDUCATION  
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LUSAKA MAIN CAMPUS**

**AN ASSESSMENT OF THE IMPACT OF INDUSTRIAL ARTS  
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**A FIELD RESEARCH PROJECT SUBMITTED FOR A  
DISSERTATION IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE AWARD OF A DIPLOMA IN  
ADULT EDUCATION**

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## **DEDICATION**

This work is dedicated to my devoted wife Elizabeth M. Ndopu and my beloved children: Rhoda Mbundi Ndopu, Rommie Mabengani Ndopu, Ruth Sanyambe Ndopu, Robert Mwanamwalye Ndopu (Jr), Emmanuel Mutami Ndopu and Christopher Ndopu Ndopu, for their tireless, patience, support and encouragement during the period of my study at the campus. Without their unmeasurable sacrifice my studies would have not been accomplished.

It is also dedicated to my dear mother Mama Alice Kamano Mutami and to my late father Mr. Christopher Ndopu Mabengani whose demise left a dent in my life.

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## **CHAPTER ONE**

### **INTRODUCTION**

After independence in 1964, the educational system of Zambia was designed to emphasize the importance of academic subjects at all levels of education. A few years later, however, the Ministry of Education reviewed syllabuses and stressed the teaching of Industrial Arts as one of the main aspects in the reform. This was due to the growth of youth unemployment especially among the school leavers. Hence, this prompted the government to introduce Industrial Arts subjects in both primary and secondary schools.

The Industrial Arts project was agreed in 1974 between the government of Zambia and FINLAND. Its objective was to assist the implementation of Industrial Arts in primary schools.

The project began as a form of pilot project in Kabwe Region where 689 tool boxes were distributed to local primary schools. The tool-sets were provided by Finland. The cabinets for the tools were locally designed and made in Zambia during the 1980-83 distribution.

It was found necessary, on the basis of the Kabwe Region experience to start an effective pre-service teacher training in Industrial Arts. From 1977 to 1988 Finland supported this activity by means of personnel and workshop construction throughout the country.

There were many factors that affected the impact of Industrial Arts. To this effect this study was to try to assess the impact of Industrial Arts in Monze District Urban School from 1983-93.

## **1.1 STATEMENT OF THE PROBLEM**

Youth unemployment especially among the school leavers in Zambia had been a problem at such magnitude and complexity. It demanded to be accorded the highest priority in every nation's development programme. Since unemployment was largely a result of diverse economic conditions it was essential that concerted effort was made to restructure and revitalise the economy, there by generating employment opportunities for the school leavers. (Mwanalushi 1990:56-57). In this connection, the Government of Zambia felt it necessary to introduce the teaching of Industrial Arts subjects in both Primary and Secondary schools. Before the Government extended this idea to both primary and secondary schools in the whole country, Industrial Arts subjects were only taught in Trade schools in Lusaka, Kabwe and Livingstone. Educational Reform (1975:45).

The introduction of Industrial Arts subjects in both primary and secondary schools started in 1983 even though the distribution of tools were delivered in schools much earlier in some schools in some provinces. Unfortunately there were no trained or qualified teachers to utilize the tools. Hence many of these tools were being used by school administrators and teachers for their own personal gain.



To that effect the discussion had been centred mainly on what kind of Education should be offered to a Zambian child in order for him to fit well in the society in which he lives. Ndopu (1992:2) identifies a Zambian child needs Education which must equip him not only with academic attainment but also with production skills as well as develop in him a sense of love for work.

## **1.2 PURPOSE OF THE STUDY**

The purpose of the study was to attempt to assess the impact of Industrial Arts Programme as to whether it was being implemented accordingly. The schools under the study were Monze District Urban schools vis-a-vis Monze Town Basic, Monze Basic, Monze East Basic and Manungu Primary schools.

## **1.3 OBJECTIVES OF THE STUDY**

In order to come up with dependable data and solution to the problem under study, the study had the following objectives:

- (i) to assess whether the tools distributed in all schools in 1983 were still adequate for implementation of Industrial Arts. (I/A)
- (ii) to find out if the available tools were effectively and fully utilized
- (iii) to investigate whether the Industrial Arts programme received special attention in respect of desk rehabilitation exercise.
- (iv) to assess what had been done to both stolen and missing tools in schools.
- (v) to find out if schools had continuously received industrial arts consignments from 1983-1993.

#### **1.4 HYPOTHESES OF THE STUDY**

- (i) the tools distributed in all schools were not enough to cater for every child.
- (ii) the effective utilization of the tools depended upon the individual Industrial Arts teacher and headmaster.
- (iii) the Industrial Arts programme received attention from the Government.
- (iv) nothing has been done in most schools in terms of replacement of either missing, broken or stolen tools.
- (v) Over enrolment in schools made the desk rehabilitation programme fail to meet the demand from the community.

#### **1.5 RELEVANCE OF THE STUDY**

The researcher felt that it was important to assess the impact of Industrial Arts programme so that the results of the study would be of some help to the decision makers and donors. He felt that the data from the study might reveal some causes and some suggestions for a change to the Educational system. Though the number of schools which were studied were not enough, the researcher felt that the information collected would reflect what was taking place in other schools - throughout the District, Province and the country at large.

Since very little had been done on the Industrial Arts subjects, the researcher assumed that the study would just be the beginning hence it would encourage other interested researchers to carry out more study on Industrial Arts programme.

## **1.6 ASSUMPTION OF THE STUDY**

It was assumed that the tools which were delivered in 1983 in all the schools where the study would be conducted were not enough because many classes in these schools were over enrolled and some of the tools were missing and they had not yet been replaced. It was also assumed that even though the tools were to be not adequate, Industrial Arts programme received special attention in terms of timber and bolts for the desk rehabilitation exercise.

## **1.7 LIMITATION OF THE STUDY**

The study was limited to schools in Monze urban due to limited funds, time and resources. Although the study was limited to Monze urban schools, the researcher felt that the information collected would reflect what was taking place in other schools throughout the District, province and the country as a whole. Hence the data collected from the study revealed some causes and some suggestions for a change to the educational system.

## **1.8 DEFINITION OF TERMS**

Since the following terms were used in this dissertation, it was important that they were defined:

### **(i) ADEQUATE**

The researcher's definition referred to a situation where the tools distributed to schools were enough for the purpose of teaching Industrial Arts (I/A).

(ii) ASSESSMENT

The researcher referred to the importance of Industrial Arts. An estimation value of Industrial Arts in Monze District township schools.

(iii) IMPLEMENT

Researcher's definition referred to a situation where decisions and plans were put into effect in order to fulfil an undertaking, in that case Industrial Arts.

(iv) INDUSTRIAL ARTS

Referred to an educational body of related subject matter or courses organised for the development of understanding the aspects of Industrial and technology. The related subjects were woodwork, metalwork, building craft, basketing, leather craft and homecraft, it consisted of transforming different kinds of materials in order to make useful things.

(v) REHABILITATE

The researcher referred to a state where school furniture such as chairs, tables and desks were repaired and restored to a proper condition for use.

(vi) SCHOOL ADMINISTRATORS

These included people in authority such as Headmasters, Deputy Headmasters and Senior Teachers who were responsible for the day to day administration of the schools they ran.

(vii) UTILIZE

Researcher referred to the use of the Industrial Arts tools. That was if the tools were being used in a proper way as they were supposed to.

## CHAPTER TWO

### 2.0 LITERATURE REVIEW

If the children and youth of a nation are afforded opportunities to develop their capacities to the fullest, if they are given the knowledge to understand the world and the wisdom to change it, the prospects for the future are bright. (Urie Bronfenbrenner).

Industrial Arts had been practised in Zambia since the early Iron Age when man knew the art of building a shelter to protect himself from animals and cold as well as making tools for his home use. Industrial Arts which was known as Craft long ago was a wide field. It was an educational body of related subject matter or courses organised for the development of understanding the aspects of Industry and technology. These related subjects were wood-work, metal-work, building, craft, basketry, leather craft and home craft. When learning those subjects the body was involved especially the mind, hands and eyes. (Tembo, 1988).

Industrial Arts involved many aspects and many channels to influence on the individual skill and personal development and through it on the society as a whole, its technological progress, its practical surroundings and the every day life of the people. Technology was what was taught in Industrial Arts. The word came from Greek words "techne" art, skill; and "logos" study. So it meant "the study of skills". It consisted of transforming different kinds of materials in order to make useful things. Kananoja (1983:26).

The traditional education was designed to prepare the African child to use the best elements out of his Ethnic environment. In that respect the emphasis was on the child's use of his experience in making the fullest possible use of whatever resources which were available within the locality. Mutale, (1989:3). Later on with the coming of the missionaries from Europe, that art of making tools such as chairs, desks, spoons, axe and hoe handles was introduced in many mission schools as part of the curriculum even though it had different names like trades or crafts as they were some times called. Snelson, (1990:164).

The mission schools which were set up in many part of the country, had workshops in which the different trades were to be taught. The whole purpose of introducing the Industrial Arts was for maintenance purposes. Later on the Northern Rhodesia Government followed what the mission schools were doing. They established carpentry and brick work trades as part of the training in some educational institutions especially in secondary schools, while in primary schools craft lessons were conducted. Pupils repaired desks, chairs, axe handles, sweeping brooms and many others. However, even though those items were being made by pupils very little emphasis came from school authorities on the importance it attached to the educational benefits it could bring in the lives of the pupils. The subject in schools had no doubt been too little understood all over the world. It's development had been forgotten under the major emphasis of Science and perhaps as well as the language teaching. Kananoja, (1983:19-21). To make matters worse, the early trade schools which had been established in other parts of the country were closed in 1962 and re-opened five years later.

According to Kananoja (1983:20) In traditional education, education to work happened naturally. Girls in Africa were trained by women to do their jobs, while boys were trained by men to do their share. However, the colonising effect had destroyed many traditional system of education. When being a servant became one of the most valued professions, when the false culture of the white men became a uniform ideal of the black people, when living in town as a loose and unemployed citizen became more important than to construct the country or the village, the real national basis of natural kind of education was destroyed as well.

During the pre-independence period around 1940-1964 Industrial Arts which was taught to the boys had emphasis on practical skills. In carpentry and joinery work, pupils made furniture and constructed roofs for houses. During the process they learned many skills in care and use of tools and organisation. In construction they built brickhouses. Both carpentry and brick-making included simple drawing. Other industrial arts taught were basketry, wood carving and leather work. Kananoja (1983:21).

It was important to note that while some Industrial Arts skills (brick-making and carpentry) were taught in nearly every school, others were not. The reasons being that there was no uniform syllabus for Industrial Arts, and the situation varied from school to school depending on the materials and personnel available at that particular school.

After independence in 1964 the Government of Zambia faced serious man power problems in the field of administration and education. The urgent need for training at all levels was seen as a national problem. The educational system of the country therefore had to be designed to emphasize the importance of academic subjects at all levels of education. For this reason Industrial Arts which were taught in primary schools during the pre-independence era were gradually phased out of the school syllabus. Specialized teachers and instructors were transferred to other duties or retrained to work as ordinary classroom teachers. Workshops were converted into classrooms and tools in most cases redistributed to secondary and trade schools.

Following the Saunder's Report of November, 1967 the Zambian Government decided to formally establish technical education aimed at providing comprehensive training programmes. It was recognised that technical education and vocational training were more meaningful and permanent form of national development. Hence the programme mainly concentrated and still concentrate on full time pre-employment training. Educational Reforms (1977:49).

In 1968 the Zambian Government took a decision to expand technical education and trades training. That decision set the pace and pattern of Zambia's present training programmes in the Department of Technical Education and Vocational Training (D.T.E.V.T). Hence at that time, technical education was governed by the provision of the Technical Education and Vocational Training into a Department (Educational Reforms, 1977:49).



In 1969, the former President of the Republic of Zambia Dr. K.D. Kaunda, emphasized the importance of technology even more clearly when he wrote, on 6th November, 1969, in a forward to the "Statement of Policy and Intent" on Technical Education and Vocational Training that:

"We live in an age of Technological achievement and if the nation is to serve itself and to play an effective and productive role in the World Community, it must itself be prepared to train its people, not only to use but to maintain and create the technical apparatus which increasingly supports the modern Community. If we allow ourselves to rely entirely upon foreign expertise, we run the risk of becoming the slaves of technology rather than its master". (Statement of Policy and Intent, 1969:2)

After the former President had said the above words, some Trades Training Institutes like Kabwe, Livingstone and Luanshya came into being. In all those Institutions, carpentry joinery, bricklaying and plumbing were taught.

In secondary schools, wood work and metal work were introduced. The Trades Training Institutes only catered for those who had completed their grades VII and IX school leavers. Later the government felt that the teaching of those vital skills should be extended to primary schools after seeing that the programme was achieving tangible results.

Before the Educational Reform document was published the importance of Industrial Arts subject in school curriculum was realised. Hence in 1974 the Government of Zambia presented a proposal to the Government of Finland for a project in the field of teaching Industrial Arts subjects. The two Governments agreed during the negotiations on bilateral development co-operation that the

Finnish resources, in form of personnel and equipment would be provided during 1974-76 to support the programme. Before Industrial Arts tools were distributed to all primary schools in the country, Kabwe region was the first to receive the tools where the programme started as a pilot project. Sarvi, J. (1971:1). During the pilot project 689 tool boxes were supplied to local primary schools around Kabwe. The tool boxes contained various tools such as hacksaws, Iron smooth, tape rule, Try square, knives etc. Practical Subjects, Teachers Handbook (1981:7-27). Curriculum Development Centre (C.D.C).

Although the tools were supplied early in many schools teaching Industrial Arts did not begin at the same time due to lack of skilled teachers. In fact many school teachers wondered as to what use the tools were to be put. As a result most of the tools found themselves in wrong hands. Some few Headmasters sold the tools to some local carpenters or they were given out to friends so much that by the time these Head knew the purposes of the tools to the school the tool boxes were nearly empty or completely empty.

After seeing that the Kabwe pilot project was producing positive results, the government decided to extend the teaching of Industrial Arts to other provinces. Hence tool boxes were also supplied to schools in other regions. Even then, the training of manpower had not started yet. As a result misuse of tools was eminent in many schools and other regions as well.

It was not until 1983 that the training of Industrial Arts subject teachers started at the Curriculum Development Centre (C.D.C.) in Lusaka. This was a one year course. During the year under review twenty seven (27) teachers graduated in Industrial Arts with Advanced course Primary School Certificate. When CDC stopped training the teachers, the course was introduced at Chalimbana National Inservice Training College (NISTCOL). Teachers who went to NISTCOL to train as Industrial Arts teachers were those who were already trained saving teachers who were trained in teaching methods of other subjects. In well organised schools, especially grades one, two and three status teachers of industrial arts did not teach other subjects apart from Industrial Arts, Sarvi, (1987).

The Zambian Government decided to train lecturers who would be conducting the courses in Teacher Training Colleges. This course took place in Luanshya Technical and Vocational Training College in 1988, Sarvi, (1987:2).

The Finnish Government took the responsibility of funding and the training of the Zambian teachers in Industrial Arts, the building of workshops in schools and colleges, they supplied the tools and funded all seminars held throughout the country. By the end of 1988, FINNIDA had spent US\$9,000,000 on the programme while the Zambian Government had only spent K1,200,000 towards the same programme. All this had been in form of materials and manpower. On the other hand the planning and writing of the syllabus and teachers handbook had been done at the C.D.C., where two Zambian Senior Officials in collaboration with Finnish Experts had been in charge, Sarvi (1987:2).

The first Finnish Advisor was recruited in 1983 at Regional level. And was sent to the Eastern Region. Thereafter, Regional Advisors were sent to the Copperbelt, Southern, Western, Luapula and Northern Provinces. Plans were there to send more to Regions. In 1981 the C.D.C. staff made study tours to Botswana and Swaziland. Two Zambian officials and the Director visited Finland in 1983 and 1984 respectively to go and see how the programme was performing there, Sarvi (1987:3).

Since the Industrial Arts programme started there had not been a serious investigation on the basis of evaluation to see if its objectives were being achieved. That was why the researcher became interested and wanted to investigate and evaluate the programme so that the donors and the administrators of the programme in the Ministry of Education would be enlightened on what was going on in schools.

The main aim of teaching Industrial Arts in Primary and Basic schools were to repair the broken desks, chairs, tables and even making new furniture or desk rehabilitation as well as to equip pupils with skills so that they could be self employed when they drop out of schools. However, the main aims as worked out by the Curriculum Development Centre (1981) were as follows:

1. To give pupils readiness in those manual skills that they were expected to be needed in their life as Zambians.
2. To create positive attitudes among the pupils.

- (a) the respect of manual work, essential for the development of Zambia.
  - (b) the respect of labour and trades in which Industrial Arts were needed.
  - (c) the value of Industrial Arts, besides being an occupation, as a means to be more self reliant.
3. Industrial Arts should give pupils an opportunity to become acquainted with modern materials, working procedures and technology.
  4. Industrial Arts should aim at fostering and transmitting cultural heritage.
  5. The teaching of Industrial Arts should prepare the pupils to the world of work by giving working habits and knowledge of trades.

As the old Romans said, "Non scholae sed vitae discimus" which meant "We are not supposed to learn things for the school but for life". Life for a primary school pupil means connections with daily work, cooking, housing, farming, hobbies, trades training interests etc. Kananoja, (1983:49).

In conclusion Ndopu (1992:7) states that a teacher should bear in his mind that he is not the only source of knowledge but a facilitator. He further says knowledge gained by self-effort and put into practise is better assimilated and remembered than that which is merely memorised.

## CHAPTER THREE

### 3.0 METHODOLOGY

The researcher used a case study research design in order to give an accurate amount of the findings of the study. The researcher felt that evaluating the Industrial Arts tools, effectiveness, attitudes of Headmasters, Industrial Arts teachers and pupils towards Industrial Arts would provide important clue in identifying areas which would need the attention of the authority.

#### 3.1 Population

The subjects from whom the data would be collected would be 48. That number would be drawn from the four schools found in Monze township and it would include:

- (i) Headmasters from the four (4) schools
- (ii) The four (4) Industrial Arts teachers
- (iii) The pupils from grade nine (9) drawn from the four schools namely: Monze Town Basic, Monze Basic, Monze East Basic and Manungu Primary school which had an open secondary classes as well.

#### 3.2 Sample population

To make sure that the whole population was well represented, the researcher used simple random sampling. The sample population of forty eight (48) subjects was drawn as follows:

- (i) All four (4) Headmasters from the four schools in Monze urban would be chosen purposefully.
- (ii) All four (4) Industrial Arts teachers from the four (4) schools would also be chosen purposefully.
- (iii) Forty (40) pupils drawn from the four schools. Five (5) pupils or subjects representing each class of grades 9A and 9B, thus making the total of ten (10) subjects from each school. These subjects (pupils) were randomly picked. Folded pieces of paper on which either 'Yes' or 'No' were written, and distributed to the pupils. Those who picked the papers on which 'Yes' was written, were issued with the questionnaires.

### 3.3 Data collection instruments

The principal instrument for data collection were questionnaires which were prepared in three sets. The researcher used three (3) separate questionnaires, one for the pupils in grade nine (9) one for the Industrial Arts teachers and one for the Headmasters of the schools. For the Industrial Arts teachers and Headmasters questionnaires were also multiple choice and a few open ended questions. The questions were answered independently by each of the respondents and collected by the researcher. Multiple choice questions made it easy for the respondents to understand and answer them quickly to avoid wastage of time. It was also easy for the researcher to quantify in data analysis.

## CHAPTER FOUR

### 4. DATA ANALYSIS

This chapter provides the information which was collected during the research. The data was analysed by the use of tables and percentages. In other words the information from the questionnaires was summarised and calculated manually with descriptive percentages. The first analysis of tables were responses from the pupils. The second tables were the responses from Industrial Arts teachers and the third analysis were the responses from the headmasters. The study sought to assess the impact of Industrial Arts in Monze District Urban schools from 1983-1993.

#### RESPONSES FROM PUPILS

The following tables show the findings from the pupils.

**TABLE:1**

#### THE IMPORTANCE OF THE SUBJECT

RESPONSES	FREQUENCY	PERCENTAGE
(a) Yes	38	95
(b) May be	1	2.5
(c) No	1	2.5
TOTAL	40	100

The table above shows that 95% thought of it as an important subject in their lives.



**TABLE:2**

UTILISATION OF TOOLS

RESPONSES	FREQUENCY	PERCENTAGE
(a) I don't Know	3	7.5
(b) Yes	33	82.5
(c) No	4	10.0
TOTAL	40	100

The table above revealed that 82.5% of the respondents said that the tools were utilised properly.

THE RESULTS OF BROKEN OR MISSING TOOLS

The study revealed that 70% of the respondents said that when a tool got lost, broken or missed the respondent in question was told to replace it. While 17.5% said that nothing was done in terms of replacement. This might be due to the fact that some pupils were not aware of the regulation that required a respondent involved to replace a tool lost or broken.

INADEQUACE OF TOOLS

45% of the respondent said that they didn't have adequate tools to use in their workshops. 42.5% said that they had adequate tools while 12.5% were not sure.

**TABLE:5****REPAIR OF SCHOOL FURNITURE**

<b>RESPONSES</b>	<b>FREQUENCY</b>	<b>PERCENTAGE</b>
(a) Sometimes	6	15
(b) No, we don't	3	7.5
(c) Yes, we, do	31	77.5
<b>TOTAL</b>	<b>40</b>	<b>100</b>

As the above table shows 77.5% of the respondents agreed that they did some repair work to school furniture apart from making chairs, knives, brushes etc.

**TABLE:6****INVOLVEMENT IN THE DESK REHABILITATION**

<b>RESPONSES</b>	<b>FREQUENCY</b>	<b>PERCENTAGE</b>
(a) We have not yet started	8	20
(b) Yes, and we have made quite a number	28	70
(c) No, we don't have plunks and bolts	4	10
<b>TOTAL</b>	<b>40</b>	<b>100</b>

70% of the respondents said that they were involved in the desk rehabilitation exercise and they had made quite a number of them.

## INADEQUATE OF DESKS IN SCHOOLS

The study revealed that 52.5% of the respondents said that they had inadequate of desks in their schools while 32.5 said they had enough.

**TABLE: 8**

### THE SELL OF SCHOOL PRODUCTS MADE FROM 1/A

RESPONSES	FREQUENCY	PERCENTAGE
(a) No	14	35
(b) Yes	23	57.5
(c) I dont know	3	7.5
TOTAL	40	100

The above table shows that 57.5% of the respondent agreed that the Industrial Arts products were sold while 35% disagreed to that effect.

## HOW MONEY REALISED WAS KEPT

47.5% of the respondent said that the money was kept by the Industrial Arts teacher while 30% said that they didn't know who kept the funds. Though the responses varied, the researcher felt that the information given by the respondents (pupils) was not reliable because according to the information given by the headmasters and the Industrial Arts teachers, 60% of all the school studied had generated some funds from the sales of the items, and 40% had not generated any funds so they had no funds to control or kept by either of those mentioned in the responses. This state of ignorance reflected lack of information between the school administration and the pupils.

## PUPILS ON THE INDUSTRIAL ARTS FUNDS COMMITTEE

The study showed that 70% of the respondents disagreed that there were some pupils on the Industrial Arts Committee while 30% said that they were some pupils on the committee. According to the information given by the headmasters in all the schools studied, it was revealed that in all the school where funds had been realised, there were no pupils on the committees because of no reliable funds as such.

**TABLE: 11**

### HOW INDUSTRIAL ARTS FUNDS WERE BEING USED

RESPONSES	FREQUENCY	PERCENTAGE
(a) No, I am not happy	3	7.5
(b) Yes I am happy	27	67.5
(c) I am not sure how the money is used	10	25
TOTAL	40	100

The table above shows that 67.5% of the respondents revealed that they were happy and in the way the funds were being used while 25% said that they were not sure of how the funds were being used.

Though most respondents said that they were happy with the way the funds were being used the researcher felt that this was not true since they did not know how the funds were being used as they had no representatives on the committees.

They seemed to have agreed just for the sake of answering the question to paint a good image of their headmasters and teachers.

TABLE: 12

THE AVAILABILITY OF WORKSHOPS

RESPONSES	FREQUENCY	PERCENTAGE
(a) In an improved shelter	4	10
(b) In the open	5	12.5
(c) In the workshop	31	77.5
TOTAL	40	100

75.5% of the respondents said that the subjects were taught in the workshops while 12.5% said that the subjects were taught in the open.

INTEREST SHOWN BY THE TEACHER

The study showed that 82.5% of the respondents said that their teachers had keen interest in teaching the subjects.

PERIODS STRICTLY FOLLOWED

55% of the respondents said that Industrial Arts teachers had never been substituted by any other things while 37.5% of the respondents said that the Industrial Arts teachers substituted the periods for other subjects.

## INDUSTRIAL ARTS TEACHERS RESPONSES

The following tables show the findings from the Industrial Arts teachers.

TABLE: 15  
TRAINING OF TEACHERS

RESPONSE	FREQUENCY	PERCENTAGE
(a) From my own experience	0	0
(b) Chalimbana	1	25
(c) From my pre-college	3	75
TOTAL	4	100

The table above shows that 75% of the respondents were trained from their respective pre-colleges. While 25% were again trained at Chalimbana.

TABLE: 16  
DURATION OF TRAINING

RESPONSE	FREQUENCY	PERCENTAGE
(a) 3 months	1	25
(b) 6 months	0	0
(c) 1 year	0	0
(d) 2 years	3	75
TOTAL	4	100

As it is shown on the table above 75% of the respondents were trained for two years at their pre colleges not only in Industrial Arts Subjects but in all primary academic discipline.

TABLE: 17

PERIODS OF TEACHING

RESPONSE	FREQUENCY	PERCENTAGE
(a) 3 periods	0	0
(b) More than 15 periods	3	75
(c) I teach ____ periods per week	1	25
TOTAL	4	100

75% of the respondents had 15 or more periods per week while 25% taught less than 2 periods.

PROVIDERS OF TOOLS USED IN THE WORKSHOP

The study revealed that 100% of the respondents said that the tools they used were given to them by the Finnish Government.

INADEQUACE OF TOOLS

100% of the respondents said that the tools supplied were not enough to cater for all pupils as most classes were over enroled.

WHAT THE SCHOOL AUTHORITIES WERE TRYING TO DO TO INCREASE THE NUMBER OF TOOLS

The study found that 75% of the respondents were trying to buy those which were found to be inadequate. While 25% said that nothing was done to increase the number of tools.

TABLE: 21

MISSING, BROKEN OR STOLEN TOOLS

RESPONSE	FREQUENCY	PERCENTAGE
(a) Report to police	4	100
(b) Nothing is done	0	0
(c) Bought and replaces by the school	0	0
TOTAL	4	100

According to the information in the table above 100% of the respondents said that they only reported to police and there after nothing was done.

INVOLVEMENT IN THE DESK REHABILITATION

The study revealed that 100% of the respondents said that they were involved in the desk rehabilitation exercise in their respective schools.

TABLE: 23

FINANCIAL HELP FROM THE HEADMASTER

RESPONSE	FREQUENCY	PERCENTAGE
(a) Yes	3	75
(b) Sometimes	1	25
(c) No, and lacks Interest	0	0
TOTAL	4	100



75% of the respondents said that they were given financial help by their headmasters and 25% were also sometimes given help.

TABLE: 24

INDUSTRIAL ARTS TEACHERS TEACHING OTHER SUBJECTS

RESPONSE	FREQUENCY	PERCENTAGE
(a) No	1	25
(b) Yes	2	50
(c) Sometimes	1	25
TOTAL	4	100

50% of the respondents said that they were compelled by their headmasters to teach other subjects in the school while 25% were not compelled to teach other subjects apart from the Industrial Arts. The other 25% said that they were sometimes compelled to teach other subjects whenever there were a short fall of teachers in the school.

TABLE: 25

INCREASE IN CLASSES FROM 1983-1993

RESPONSE	FERQUENCY	PERCENTAGE
(a) Very much	1	25
(b) No	0	0
(c) Just a few cases	3	75
TOTAL	4	100

As from the table above 75% of the respondents said that just a few classes had been increased as from 1983-1993.

As for question 12, it was found out that 100% of the respondents had the same problems of inadequate tools, negative attitudes by the administrators, over crowded in classes due to over enrolment as well as lack of sufficient teachers so that the Industrial Arts teachers was not compelled to teach other subjects in the school.

HEADMASTERS RESPONSES

Headmasters results were shown in the tables below

TABLE: 26

AN INCREASE IN THE ENROLMENT FROM 1983-1993

RESPONSE	FREQUENCY	PERCENTAGE
(a) Very much	4	100
(b) Nothing since 1983	0	0
(c) Posibly next year	0	0
TOTAL	4	100

According to the data provided in table 26, it was found that 100% of the respondents agreed that schools had increased in number of enrolment from 1983-1993.

## THE IMPORTANCE OF INDUSTRIAL ARTS TO SCHOOLS

According to the data revealed it was found that 75% of the respondents said that Industrial Arts was of great help to their schools.

TABLE: 28

### INADEQUATE OF TOOLS

RESPONSES	FREQUENCY	PERCENTAGE
(a) I am not certain, the I/A teacher knows better	1	25
(b) Yes, we have enough	2	50
(c) There is real a problem we have no tools	1	25
TOTAL	4	100

The table above revealed that 50% of the respondents said that they had enough tools while 25% said they had inadequate of tools.

## ASSISTANCE RENDERED TO THE TEACHER

The study revealed that 50% of the respondents said that they were trying to buy some of the tools using the school resources while Monze Basic and Monze East Basic Schools responded that they had enough tools, hence as they did respond to question 4, table 28.

TABLE: 30

THE RESULTS OF BROKEN OR MISSING TOOLS

RESPONSES	FREQUENCY	PERCENTAGE
(a) I also report to police	0	0
(b) I charge whoever is responsible to replace it	4	100
(c) Since they were donated by FINNIDA it is difficult to charge anyone	0	0
TOTAL	4	100

Question 5 reveals in the table above that 100% of the respondents said that they charged whoever was responsible to replace the broken or missing tools or tool.

THE BORROWING OF TOOLS BY OUTSIDERS OR TEACHERS

According to the data revealed it was found that 50% of the respondents said that they didn't allow the school tools to be borrowed by anybody.

TABLE: 32

INDUSTRIAL ARTS TEACHERS TEACHING OTHER SUBJECTS

RESPONSES	FREQUENCY	PERCENTAGE
(a) Yes	1	25
(b) No	3	75
(c) He/she refuses to take up other subjects	0	0
TOTAL	4	100

he table above shows that 75% of the respondents said that they did not allow their Industrial Arts teachers to teach other subjects while 25% forced them to do so.

### OTHER CONSIGNMENTS GIVEN TO SCHOOLS

he study revealed that 75% of the respondents received other consignments of tools in different years after the first consignment of 1983.

s for question 9, it was found out that 50% of the respondents had the same or similar problems of inadequate tools, and suggested that the government should allow individual schools to buy the tools in government stores. This was because the tools were very expensive in any local hardwares.

hey also recommended that Industrial Art teachers be sent for refresher courses or even for further training. This was represented by 100% of the respondents.

## 1 DISCUSSION OF FINDINGS

he data collected has been critically analysed by using tables, frequencies and percentages from responses respondents gave as above. This was by describing the findings that was interpreted.

he first objective of the study sought to assess whether the tools distributed in all schools in 1983 were still adequate for implementation of Industrial Arts. The results revealed that the tools distributed in all the school where the study was

conducted were not enough because most classes that studied Industrial Arts subjects were over enrolled and that some tools were missing. Though the tools were not enough some schools did quite well in terms of desk rehabilitation exercise. This was shown and proved by the results the researcher found. Teachers of Monze Basic and Monze Town Basic were doing a recommendable job in this direction. The results of Monze East Basic and Manungu Open Secondary classes were not encouraging because the teachers were not being utilised to the full. At these two schools the Industrial Arts teachers were compelled to teach other subjects in school, while in other schools teachers were not given other subjects to teach. This could be due to insufficient teachers in these schools. The school where the study was not done as planned by the researcher was Tagore Basic School. When asked why Industrial Arts subjects were not taught, the Acting Headmaster said that there was no trained teacher to teach the subjects. The teacher who used to handle the subject previously was transferred to another school. Hence he was still awaiting for another teacher to be posted to his school. However, this had taken the office of the District Education Officer the whole one year still scouting for one teacher to be transferred to the school in question. Otherwise the school had the tools and a workshop build by FINNIDA but it was not utilised for the whole year of 1994.

The second objective was to find out if the available tools were effectively and fully utilised. The results in table 2 indicated that 82.5% of the respondents agreed that the tools were being used effectively.

The third objective was to investigate whether the Industrial Arts was receiving special attention in respect of desk rehabilitation exercise. The results in tables 6 and 22 indicated that 70% and 100 respectively of the respondents agreed that they were involved in the desk rehabilitation, even though they were facing problems of insufficient tools and lack of sufficient funds to buy bolts and plunks. Monze Town Basic and Monze Basic had made quite a number of desks which even the researcher saw, but they still needed to make more desks as the number of pupils was quite big. This was an on going project.

The fourth objective was to asses what was being done to both stolen and missing tools in schools. The results in tables 3 and 30 revealed that 100% of the respective respondents said that the tools were replaced by whoever was responsible for either broken or missing. On the contrary the researcher cast a doubt and agreed with the other respondents in table 21 over the same; who said that the majority of the school did nothing to replace the tools that had either been stolen or broken. The researcher felt so because there had been no report to the founders or to the police. To this effect the researcher thought of negligence among the pupils and teachers. This lead the researcher to the conclusion that there were no strong rules of governing the use of the tools in school due to a lot of missing or stolen tools.

The fifth objective was to find out if schools had continously received Industrial Arts tools as from 1983 to 1993. According to the results revealed from table 33 showed that schools had continously received new consignment of tools in different

years though not enough to meet the demands of the increasing population. The researcher found out that the industrial Arts tools distribution was then done by the full control of the Zambian government through the Curriculum Development Centre (C.D.C.). The Finnish Government handed over the Industrial Arts tools distribution to the Zambian Government in 1988.

Apart from what has been discussed above, the researcher made other observations which were considered crucial in arriving at conclusions and recommendations. In table 1 it was shown that 95% of the respondents (pupils) thought of Industrial Arts as an important subject in their lives. This was encouraging but if the Industrial Arts teachers and administrators did not show much interest pupils could also become discouraged. This should not be encouraged, teachers and administrators should not have negative attitudes towards this noble skill. It was revealed at Monze Basic School that the money that was realised from the sales of chairs, knives, brushes, wallets and many other items was used to purchase more Industrial Arts materials. At Monze Town Basic the Industrial Arts teacher said that due to acute shortage of tools he sometimes borrowed the tools from either Tagore Basic or Monze Basic Schools. Thus the tools his school didn't have. This was very encouraging indeed because he used his initiative to meet the shortfall he required.

It was revealed in table 12 that most of the urban schools in Monze District except one school had Industrial Arts workshops build by FINNIDA. These boosted the



morale of both pupils and teachers. The school which had no workshop was Manungu Primary School, Open Secondary Classes (O.S.C).

On the question of training and duration of the Industrial Arts teachers, tables 15 and 16 revealed that many teachers were trained from their pre-colleges and this represented 75% and the duration was two years and 25% of the respondents were retrained for three months at NISTICOL - Chalimbana.

It was found out that from 1983 to 1993 there had been an increase of 75% of enrolment in all schools while the structures or buildings remained the same. This is indicated in table 25.

The general view of all Industrial Arts (I/A) teachers complained of inadequate tools, negative attitudes by their administrators, over crowded in the workshops or the few tools due to over enrolment as well as lack of adequate I/A teachers to carry out the work, were some of the general comments the teachers had put forward.

In conclusion also headmasters from the very schools in question had their suggestions and comments. The main ones being inadequate tools in their respective schools, they also recommended that Industrial Arts teachers be sent for refresher courses or even for further training to acquaint themselves with modern machines.

## CHAPTER FIVE

### 5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 SUMMARY

- (a) The aim of this study was to assess the impact of Industrial Arts in Monze District urban schools from 1983 to 1993. The study found that the Industrial Arts tools which were and are still being distributed to many schools for the teaching of Industrial Arts subjects were not adequate because of large numbers of pupils and many tools were missing.

While other schools compelled their Industrial Arts teachers to teach other subjects in the schools others did not do so. This could have been done due to acute shortage of teachers in those respective schools.

- (b) The effective utilisation of the tools depended upon each individual school. Particularly it all depended upon the headmaster and the individual Industrial Arts teacher.
- (c) Generally, the Industrial Arts programme was receiving attention from the Government though they were not meeting the expectation of the Industrial Arts teachers and their headmasters in terms of desk rehabilitation.
- (d) Some schools were trying to replace the broken, lost or missing tools while others did nothing to replace them.
- (e) Schools in Monze district urban were continuously receiving tools from the Zambian Government though not enough to meet the over increasing population in many schools.

## 5.2 CONCLUSION

From the findings of this study, the researcher had concluded that the impact of Industrial Arts in Monze District urban schools was not achieving the original set of objectives as expected. There were numerous problems affecting the smooth running of those schools. Some of the problems included lack of adequate tools for all pupils to use in the workshops, negative attitudes by their administrators (Headmasters), lack of adequate trained Industrial Arts teachers. The over enrolment in most schools had an adverse effect on pupils performance. In short all these problems had disruptive effects on both Industrial Arts teachers and the pupils. There was no way in which an Industrial Arts teacher could teach effectively with over fifty (50) pupils under him or her in their workshop.

## 5.3 RECOMMENDATIONS

In light of the findings of the study, the researcher came up with the following recommendations to the practitioners, policy makers and future researchers:

### PRACTITIONERS

- i) Since all Industrial Arts teachers found in these schools are primary school teachers they should be accorded chance for in-service educational programmes to equip them with appropriate skills for effective teaching. In short Industrial Arts teachers should be sent for further training. This could improve the teachers' performance. For those whose training was three months at Chalimbana should go for a longer period of training.
- ii) The lending out of tools to other members of the school and outsiders must be discouraged at all costs because this had led to many tools missing or

broken. Each schools administrator should emphasize the point that any teacher or pupils who broke or lost a tool should replace it immediately.

### POLICY MAKERS

- i) The government should make a follow-up of the tools in all schools in the country where Industrial Arts were taught to check on the number of tools available and those not available so that missing tools could be replaced and the number be increased were they were not adequate to meet the aspirations of the schools and communities.
- ii) The Regional Advisors and Inspectors in each province should try to tour the schools more often to have on the spot check of how the tools were being used in ech school. The Regional Advisors remarks could then be communicated to the government or the founders of the projects so that they were aware of how the project was doing. In the case at hand of desk rehabilitation exercise which is an going project the Inspector of Schools should definitely travel to see whether or not all schools were involved in the exercise. These tours by the Regional Advisors and Inspectors of schools would encourage the teachers to work hard and discuss with the teachers the problems they were facing. Also where the Headmasters had negative attitude advice could be given to improve the running of the school.
- iii) Policy makers should create posts and other incentives such as allowances or raise salaries for the Industrial Arts teachers.

**FUTURE RESEARCHERS**

Future researchers should conduct and focus their study by comparing students' performance in Basic and regular secondary schools in terms of Industrial Arts subjects.

## **BIBLIOGRAPHY**

- Commission for Technical Education and Vocational Training (1969) Statement of Policy and Intent. Lusaka, Govt Printers.
- Curriculum Development Centre (1981) - Practical Subjects Teachers Handbook. Lusaka, Zambia.
- Kananoja, T (1983) - Practical Subjects in Zambian Education Lusaka, C.D.C.
- Mills, H.R (1976) Teaching and Training a Handbook for Instruction.
- Ministry of Education (1977) Proposal and Recommendations of Education Reforms, Lusaka, Govt Printers.
- Mutale, A.K (1989) Involvement of Women in Teaching Industrial Arts in Mufulira District, Lusaka, NISTCOL - Chalimbana.
- Mwanakatwe, J.M (1974) The Growth of Education in Zambia since Independence. Nairobi, Oxford University Press.
- Mwanalushi, M (1990) Youth and Society in Zambia: Growing in a Changing Society. Lusaka, Multimedia Publication.
- Ndopu, M.R (1992) The Organisation of Resource work in Monze District, Lusaka - NISTCOL, Chalimbana.
- Sarvi, J (1987) The Zambian - Finnish Practical Subject for Basic Education in Zambia 1985 - 1988, C.D.C, Lusaka. (Unpublished).
- Snelson, P.D, (1990) Education Development in Northern Rhodesia in 1883-1945. Lusaka, KKF.
- Tembo, M.S.A, (1988) An Evaluation of Practical Subjects Project: A Case Study of the Chipata Township Primary Schools, UNZA, Lusaka.

## APPENDIX III

### FINANCIAL ESTIMATE

<u>QUALITY AMOUNT</u>	<u>ITEM</u>	
(a) 2 boxes	Stencils @ K5,000	K 10,000.00
(b) 2 tubes 10,000.00	Duplicating ink @ K5,000	K
(c) 1 ream	Typing paper @ K4,500	K 4,500.00
(d) 4 reams	Duplicating paper @ K4,500	K 18,000.00
(e) 6 copies	Binding report @ K1,000	K 6,000.00
(f) 2	Pens @ K150	K 300.00
(g) 2	Pencils @ K50	K 100.00
(h) 70 pages 28,000.00	Typing stencils @ K400	K
(i) 4 nights	Night allowance @ K30,000	K120,000.00
	Transport	K 30,000.00
	Sub total	<u>K226,900.00</u>
	10% Contingency	2,269.00
	<b>TOTAL</b>	<b><u>K226,900.00</u></b>

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## QUESTIONNAIRE FOR PUPILS

### INSTRUCTIONS

Please fill in the information by ticking the right answer.

Example: Which ZCCM Mine was closed in July 1994?

(a) Nchanga Mine ☐ (b) Kabwe Mine ☒ (c) Mufulira Mine ☐

If (b) is the correct answer you tick as shown use a pencil.

SCHOOL \_\_\_\_\_ GRADE \_\_\_\_\_ AGE \_\_\_\_\_ SEX \_\_\_\_\_

Now answer the following questions below:

1. Do you think learning Industrial Arts is important in your life time?

(a) Yes ☐

(b) Maybe ☐

(c) No ☐

2. Do you think you are utilizing the Industrial Arts tools properly?

(a) I don't know ☐

(b) Yes ☐

(c) No ☐

3. When a pupil breaks or loses a tool who replaces it?

(a) The Head ☐

(b) A pupil pays ☐

(c) Nothing is done ☐

4. Does your school have adequate or enough tools to use in your Industrial Arts workshop?

- (a) Yes ☐
- (b) Not enough ☐
- (c) I do not know ☐

5. Apart from making chairs, knives, brushes etc, do you also repair school furniture?

- (a) Sometimes ☐
- (b) No, we don't ☐
- (c) Yes, we do ☐

6. Is your school involved in the desk rehabilitation exercise?

- (a) We have not yet started ☐
- (b) Yes, and we have made quite a number ☐
- (c) No, we don't have plunks and bolts ☐

7. If your school is involved in the desk rehabilitation, do you have adequate desks at your school?

- (a) We shall have enough soon ☐
- (b) Not adequate ☐
- (c) Yes ☐

8. Do your school sell the products made from Industrial Arts?

- (a) No ☐
- (b) Yes ☐
- (c) I don't know ☐

9. If the products are sold who keeps the money?
- (a) The Head ☐
  - (b) The I/A teacher ☐
  - (c) I don't know ☐
10. Are there any pupils on Industrial Arts funds committee?
- (a) Yes ☐
  - (b) No ☐
11. Are you happy with the way the I/A funds are being used, if any?
- (a) No, I am not happy ☐
  - (b) Yes, I am happy ☐
  - (c) I am not sure how the money is used ☐
12. Are the Industrial Arts Subjects taught in the workshop or in the open?
- (a) In an improved shelter ☐
  - (b) In the open ☐
  - (c) In the workshop ☐
13. Does your teacher show keen interest in teaching you Industrial Arts or is he/she just forced?
- (a) He/she is forced to teach us ☐
  - (b) He/she has very high interest in teaching Industrial Arts ☐
  - (c) He/she is just fair as he/she is also learning the subject ☐

14. Does your teacher strictly follow the Industrial Arts periods or does he/she substitute the periods for other subjects?

- (a) He/she sometimes substitutes the I/A periods for other subjects ☐
- (b) He/she has never substituted I/A periods for any other things ☐
- (c) It is usually the Headmaster who usually disturbs the periods ☐

Thank you.

NDOPU M. ROBERT

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The University of Zambia  
Department of Adult Education  
Kwacha Hall 5-25  
P.O. Box 32379  
LUSAKA

24th August 1994

Dear respondent

I am a student of a course coded AE 230 (Field Project) at the University of Zambia. I am undertaking a research in Monze District Urban Schools, as a partial requirement of passing this course. The research topic is "An Assessment of the Impact of Industrial Arts in Monze District Urban Schools, from 1983-1993."

As a tradition of most researches a sample population of schools has been made. And I am happy that your school has been one of those selected. In order to facilitate the research I am kindly requesting for your favour to fill in the attached questionnaire.

Please be rest assured that all the information received from every respondent shall be treated as highly confidential and therefore, your uttermost cooperation will be greatly appreciated. May the good Lord bless you.

Thanking you in anticipation.

Yours sincerely

Ndopu M. Robert

## QUESTIONNAIRE FOR INDUSTRIAL ARTS TEACHERS

### INSTRUCTIONS

Kindly fill in the information or tick the correct answer. Example,  
Industrial Arts subjects was introduced in schools in \_\_\_\_\_

- (a) 1974 ☐ (b) 1980 ☐ (c) 1983 ☒

Tick in the box for (c) if it is the correct answer as shown.

### QUESTIONS

1. When did you train as Industrial Arts teacher?

- (a) From my own experience ☐  
(b) Chalinbani. ☐  
(c) From my pre-college. (Name) \_\_\_\_\_ College.

2. How long was your training, if any?

- (a) 3 months ☐  
(b) 6 months ☐  
(c) 1 year ☐  
(d) 2 years ☐

3. How many periods of Industrial Arts do you teach per week?

- (a) 3 periods ☐  
(b) More than 15 periods ☐  
(c) I teach \_\_\_\_\_ periods per week ☐

4. Who provided the tools that are used in your workshop lessons?

- (a) The Zambian Government ☐  
(b) The Finnish Government ☐  
(c) The Swedish Government ☐

5. Do you think the tools are adequate to carry out your lessons?

- (a) No ☐
- (b) Yes ☐
- (c) I am not sure ☐

6. If the tools are not adequate, what is the school authority doing to increase the number?

- (a) Nothing ☐
- (b) We had requested Finnida to help us ☐
- (c) We are trying to buy those which are not there ☐

7. What happens when a tool(s) is/are stolen?

- (a) Report to police ☐
- (b) Nothing is done ☐
- (c) Bought and replaced by the school ☐

8. Is your school involved in the desk rehabilitation exercise?

- (a) Certainly we are ☐
- (b) No, we have enough school furniture ☐
- (c) No, the Head seems to lack interest when we don't even have enough desks ☐

9. Does your Head give you financial help when you want to buy materials for the lessons?

- (a) Yes ☐
- (b) Sometimes ☐
- (c) No, and lacks interest ☐

10. Apart from teaching Industrial Arts subjects, are you compelled to teach other subjects in the school?

(a) No ☐

(b) Yes ☐

(c) Sometimes ☐

11. Has the number of classes at your school increased from 1983 to 1993?

(a) Very much ☐

(b) No ☐

(c) Just a few classes ☐

12. Any other comments and suggestions:

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Thank you.

Ndepu M. Robert

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Lusaka.



## QUESTIONNAIRE FOR HEADMASTERS

### INSTRUCTIONS

Please kindly fill in the information or tick as necessary.

Example: For how long have you been at this school?

(a) 3 years ☒ (b) 5 years ☐ (c) More than 10 years ☐

If (a) is the correct answer you tick in the box as shown.

### QUESTIONS

1. From 1983 to 1993 has your school increased in the number of streams or classes in terms of enrolment?

- (a) Very much ☐
- (b) Nothing since 1983 ☐
- (c) Possibly next year ☐

2. Do you think Industrial Arts Subjects are of great help to your school?

- (a) Just a bit ☐
- (b) No, I have failed to see its use ☐
- (c) Very much ☐

3. Do you think your school has enough Industrial Arts tools?

- (a) I am not certain the Industrial Arts teacher knows better ☐
- (b) Yes we have enough ☐
- (c) There is real a problem, we have no tools ☐

4. If you have no adequate tools, what are <sup>you</sup> doing to help the Industrial Arts teacher?
- (a) We are waiting from the Government to help us ☐
  - (b) Nothing, where can we get the money? ☐
  - (c) We are trying to buy some of the tools using the school resources ☐
5. What do you usually do when a broken/~~tool~~ or a missing tool is reported to you?
- (a) I also report to police ☐
  - (b) I charge whoever is responsible to replace it ☐
  - (c) Since they were donations by Finnida it is difficult to charge anyone ☐
6. Do you usually allow your teachers and outsiders to borrow the tools for their own use?
- (a) Yes ☐
  - (b) Sometimes ☐
  - (c) No ☐
7. Does your Industrial Arts teacher teach other subjects at your school apart from the Industrial Arts?
- (a) Yes ☐
  - (b) No ☐
  - (c) He/she refuses to take up other subjects ☐

8. Apart from the first consignment of 1983 Industrial Arts tools, when did you last get another consignment?

(a) Nothing ☐

(b) 19\_\_\_\_ ☐

(c) I am not certain of the year but we have new tools ☐

9. Any other comments and suggestions:

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I thank you most sincerely.

NDOPU M. ROBERT

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