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THE COORDINATION OF
EDUCATIONAL POLICY AND PLANNING
AND EMPLOYMENT POLICY AND PLANNING

VOLUME I* : A STATE OF THE ART REVIEW

Angela Little



* This volume should be read in combination
with Volume II : An Annotated Bibliography

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Angela Little is a social psycholo-
gist and Fellow of the Institute of
Development Studies, University of
Sussex, United Kingdom

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THE CO-ORDINATION OF EDUCATIONAL POLICY AND PLANNING AND EMPLOYMENT POLICY AND PLANNING.

INTRODUCTION.

This study is a contribution to Unesco's Educational Policy and Planning Division's 1984-85 programme of work on Relations between Education and Employment (subprogramme V.3.2.).

The three targets of that programme are

- to facilitate and intensify the collection, analysis and dissemination of information on the relations between education and employment
- to promote a series of studies on legislative and administrative provisions and regulations such as will facilitate arrangements for alternating study with periods of work
- to strengthen national capacities for bringing education policies and employment policies into line with one another.

The review was guided by eight broad themes:

- The role of education in the solution of unemployment.
- Study alternating with work.
- Equity and Efficiency in the education-employment interaction.
- Finding Work/Occupational choice.
- Information and the Educational/Vocational Guidance problem.
- Financial tools and incentives in linking education to training and employment.
- Education, training and employment in situations of rural and urban poverty.
- Concepts and Methods for studying the education-employment interaction.

2.

The study comprises an extensive state of the art review based on an annotated bibliography which is presented in the accompanying Volume II. The literature cited is necessarily selective. The literature search was based at the Library of the Institute of Development Studies, Sussex, U.K., whose collection exceeds 200,000 titles (or 3½ miles of shelving!). The following guidelines were used to select literature.

1. Major themes (listed on p. 1) were disaggregated into subject descriptors in line with Macro Thesaurus (2nd edition) conventions.
2. Preference was given to developing country or developing country relevant material.
3. Preference was given to subject and concept coverage rather than country coverage.
4. Preference was given to materials published over the past ten years.
5. Although the IDS Library contains a disproportionate number of titles in English, an attempt was made to include some relevant Spanish and French material.

However, even within these criteria, time constraints necessarily implied the exclusion of much relevant material. I apologise in advance to those colleagues whose relevant works have not been listed.

This review focusses on concepts and methods applicable to a wide range of context. Individual case studies are described only where they illustrate a point. Country and regional differences are stressed less than their similarities. The reader who wishes to explore the differences and the case studies in greater depth is recommended to read the annotations and source material. The annotated bibliography contains 272 items. Not all are referred to in the review.

L'HARMONISATION ENTRE LES POLITIQUES ET LA PLANIFICATION DE
L'EDUCATION ET LES POLITIQUES ET LA PLANIFICATION DE L'EMPLOI

INTRODUCTION

Cette étude fait partie du programme de travail 1984 - 85 de la Division des Politiques et de la Planification de l'Educa-tion, Unesco, entrepris dans le cadre du sous-programme V.3.2. Relation entre l'Education et l'Emploi.

Les trois cibles de ce sous-programme sont les suivantes:

- Faciliter et intensifier la collecte, l'analyse et la dif-fusion d'informations sur l'interrelation éducation-emploi;
- Promouvoir une série d'études sur les dispositions légis-latives administratives et réglementaires propres à faci-liter l'alternance de périodes d'étude et de travail;
- Renforcer les capacités nationales en matière d'harmonisa-tion et d'ajustement entre les politiques de l'éducation et les politiques de l'emploi.

L'étude traite des huit thèmes suivantes :

- Le rôle de l'éducation dans la recherche d'une solution au chômage.
- L'alternance de périodes d'études et de travail.
- L'équité et l'efficacité dans les interrelations éducation-emploi.
- La recherche et le choix d'une activité.
- L'information et le problème de l'orientation scolaire et professionnelle.
- Les outils et les encouragements financiers pour articuler l'éducation avec la formation et l'emploi.
- L'éducation, la formation et l'emploi dans les milieux ruraux et urbains défavorisés.
- Les concepts et méthodes pour l'étude de l'interaction éducation-emploi.

Cette étude comprend, dans un premier volume, une évaluation de la recherche et des expériences actuelles en matière d'éducation et d'emploi ainsi qu'une bibliographie annotée présentée dans le Volume II. La littérature citée est nécessairement sélective. Les recherches bibliographiques ont été faites à la Bibliothèque de l'Institut des Etudes sur le Développement (IDS), Sussex, au Royaume Uni, dont les ouvrages dépassent 200,000 titres (ce qui représente 5,5 km de rayons!). Les documents ont été sélectionnés d'après les lignes directrices suivantes :

1. Les grands thèmes [voir liste page 2a.] ont été divisés suivant des descripteurs par sujet conformément aux conventions du Macrothésaurus (2ème édition).
2. La priorité a été donnée au matériel intéressant les pays en développement.
3. La priorité a été donnée au traitement par sujet plutôt que par pays.
4. La priorité a été donnée aux publications parues au cours des dix dernières années.
5. Malgré la forte prédominance de publication en langue anglaise dans la Bibliothèque de l'IDS, quelques documents en langues française et espagnole ont pu être inclus.

Toutefois, même dans le cadre des critères énoncés ci-dessus, des contraintes de temps ont nécessité l'exclusion de nombreux documents dans ce domaine. Les auteurs dont les ouvrages pertinents n'ont pas été répertoriés voudront bien nous en excuser.

Cette étude est axée sur les concepts et méthodes s'appliquant à un grand nombre de situations. Les études de cas sont décrites seulement là où elles illustrent un point précis. Les points communs nationaux et régionaux ont été mis en évidence plutôt que les différences. Le lecteur désireux d'examiner en profondeur les différences et les études de cas est prié de se référer aux annotations et aux ouvrages de référence inclus dans le Volume II. La bibliographie annotée contient 272 titres dont certains ne sont pas mentionnés dans le Volume I.

THE RELATIONSHIP BETWEEN EDUCATION AND EMPLOYMENT: SHIFTS
IN EMPHASIS.

Much development literature is rhetorical. The literature on education and employment is no exception. This, combined with a rapidly growing literature, leaves many readers (especially hard-pressed policy makers) confused and frustrated. There are of course exceptions.

Two main developments distinguish the education-employment relation of the past decade from that of the previous decade. The first is the concern with global recession and its implications for unemployment, not only in the third world but also in the first, both East and West. Unemployment is now a shared common problem (OECD 1980, Koditz 1981, United Kingdom MSC 1982, Knox and Castles 1982, Little 1983). Whether the solutions are also common is an open question. The second is the growth of information technology and microelectronics and the effect on the international division of labour, unemployment, skill requirements and the educational requirements of the labour force. The impact is likely to be felt worldwide, though some would argue that third world countries will be hit especially hard. Both developments are reflected to some extent in the literature on education and work but are not yet fully integrated.

The literature on general unemployment has a rather different flavour from that on educated unemployment. Educated unemployment

was the dominant concern in most third world countries in the sixties and early seventies. The ILO Employment missions to Kenya, Sri Lanka and Colombia in 1971 and 1972 highlighted the high rates of unemployment among the educated especially the secondary educated. It was argued that the education system was responsible for structural unemployment. Secondary school students developed job aspirations which were too high, which were out of line with the job opportunities available. The solution to the problem lay partly in modifying aspirations and enhancing the dignity of manual labour, and partly in reducing income differentials so that jobs which were once low paid became attractive. During the seventies a considerable degree of research focused on the educated unemployed [for example see the ILO World Employment Programme Education and Employment Research Project synthesised by Versluis (1978)]. However, even then some writers were doubting whether the problem of educated unemployment should be separated from that of general unemployment (Blaug, Jolly and Colclough 1976, Carnoy 1977, Morio and Zocotizoum 1980).

Running alongside the literature on educated unemployment were several others which contributed to the discussion of general unemployment. These were literature on basic needs, on agricultural productivity, on trade and commodities. All point to problems of low productivity at work and low levels of subsistence and income. I emphasise here the word work rather than employment because of its broader connotation. Employment for many people refers to wage work in the formal sector of the economy. The majority of people in the majority of third world countries labour outside of this economy (though their labours may stem from it). This majority has work of

various descriptions, some of which yields an income and some goods for home consumption. These people do not have 'jobs' but they do have work.¹ Education may not be directly cited as a key determinant of the lack of work or the low productivity. Rather, other factors (such as prices policy, poor transportation) are emphasised. This literature is useful to the education and employment literature because it broadens our concept of work and economic activity and points to a set of factors which need to be acted on simultaneously if unemployment, educated and otherwise, is to be reduced.

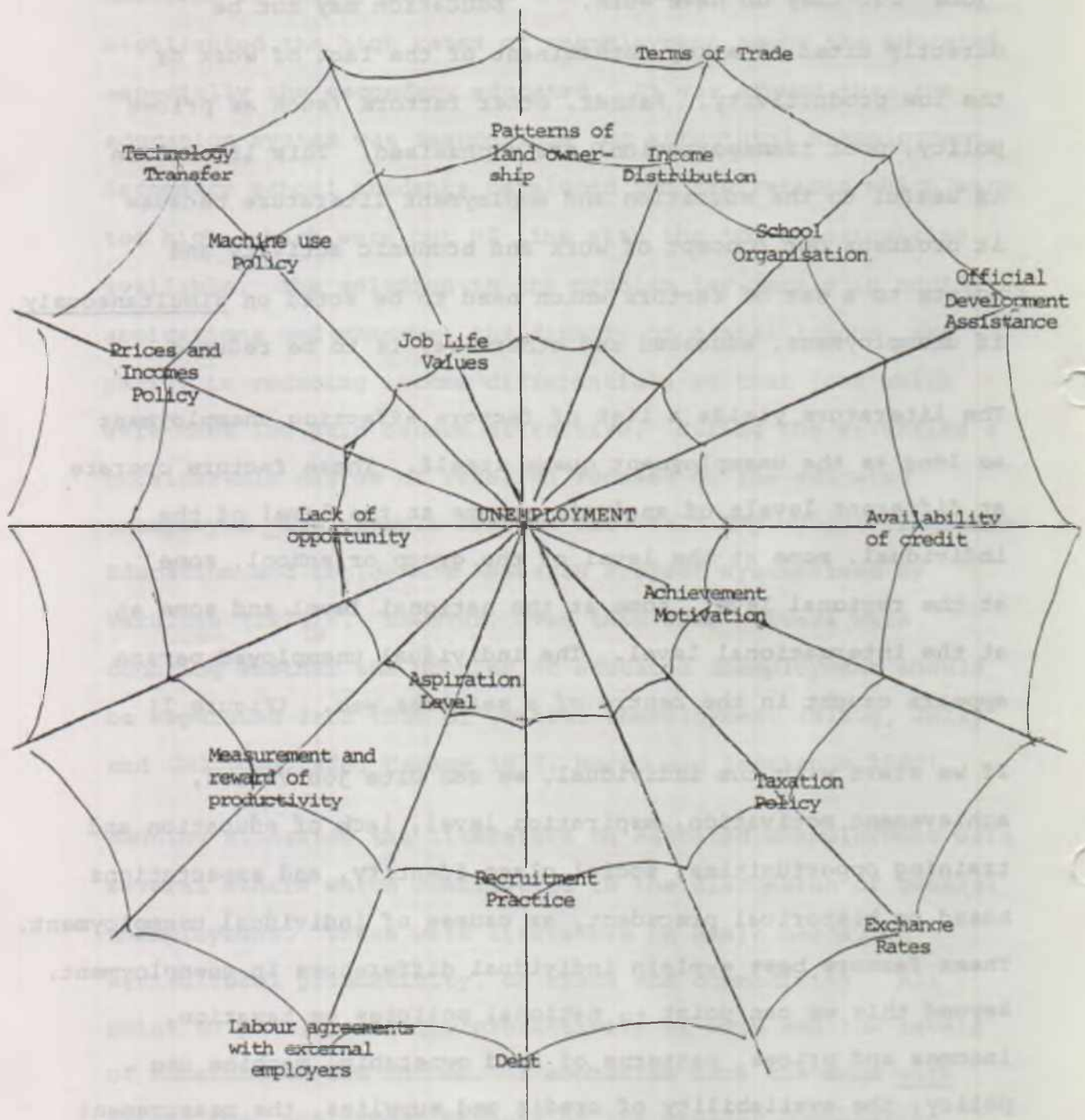
The literature yields a list of factors affecting unemployment as long as the unemployment queue itself. These factors operate at different levels of analysis - some at the level of the individual, some at the level of the group or school, some at the regional level, some at the national level and some at at the international level. The individual unemployed person appears caught in the centre of a seamless web. (Figure 1)

If we start with the individual, we can cite job values, achievement motivation, aspiration level, lack of education and training opportunities, social class identity, and expectations based on historical precedent, as causes of individual unemployment. These factors best explain individual differences in unemployment. Beyond this we can point to national policies on taxation, incomes and prices, patterns of land ownership, machine use policy, the availability of credit and supplies, the measurement

1. In most first world countries the meanings of job and work are very close. In many third world countries job or employment is a very special kind of work and the words are not interchangeable (Little 1978a)

Figure 1.

The Seamless web of unemployment.



and reward of productivity in the work place, income distribution, patterns of land ownership and types of school organisation. These factors best explain differences in unemployment rates between countries. Further than this we can cite inter-country factors such as the terms of trade between countries and low prices paid for goods, technology transfer and capital substitution for labour, exchange rate levels, labour agreements with external and multilateral employers, levels of external debt, access to official development assistance. These factors may best explain differences in unemployment between groups of countries. All combine to present a seamless web of unemployment.

Shifts in Emphasis.

We have pointed already to five broad shifts in emphasis in the literature on education and employment over the past decade.

1. - from a mainly third world problem to a third and first world problem
2. - from the birth of information technology to the growth-explosion of information technology
3. - from educated unemployment to general unemployment
4. - from employment to work
5. - from education as the key determinant of unemployment to education as one of many determinants and solutions.

In 1978 Psacharopoulos produced a review and evaluation of current research on Education and Work (Psacharopoulos 1978). Clearly written it summarises research results and identifies changes in emphasis in (mainly economic) research and activity.

Such changes reflect and reinforce changes in emphasis in development priorities. The end points he identified in the mid-seventies provide a further set of starting points for this review.

Figure 2 presents these shifts schematically. Time is divided into three columns - pre-mid seventies/mid seventies/eighties. The rows describe the starting and end points of the shift. Rows 1 - 5 have been described already. Rows 6-18 refer to thirteen of the shifts identified by Psacharopoulos (1978) and extended to the eighties by this author. The final rows identify a further 11 shifts apparent in this literature.

6. From homogeneous labour to heterogeneous labour to super-heterogeneous labour.

Labour was earlier measured by the number of heads/persons performing different occupations. These occupations were then translated into different education requirements. However, because this translation was difficult and because a given occupation was compatible with a range of educational qualifications labour began to be disaggregated by educational level and qualification (Psacharopoulos 1978). However, it is now being recognised that a given educational level and qualification is compatible with a very wide range of skills. A GCE 'O' level qualified person from one country may have a different package of skills than a GCE 'O' level qualified person from another. A primary education graduate from one area of a country may have experienced a very different type of learning from another. A Standard 7 exam in 1984 may test a different skill mix than a Standard 7 exam in 1971. The education level of labour is disaggregated further by type of skill. This attention to type of skills and mix of skill is slowly becoming apparent in the literature on education and work (Carnoy 1975a, Dore 1976a, Bowles and Gintis 1976,

Figure 2. Shifts in emphasis in research and policy on Education and Work.

Pre-mid 1970s		Mid 1970s		1980s	
1.	from	Third World Problem	to	Global problem	
2.	from	Information Technology birth	to	Information Technology growth & impact on employment	
3.	from	educated unemployment	to	general unemployment	
4.	from	employment	to	work	
5.	from	education as the key determinant	to	education as one of many determinants & solutions	
6.	from homogeneous labour	to	heterogeneous labour	to	super-heterogeneous labour
7.	from efficiency	to	income distribution	to	economic survival
8.	from income distribution	to	employment	to	
9.	from social efficiency	to	private choice	to	social and private costs
10.	from social productivity	to	screening	to	
11.	from screening	to	signalling	to	Disaggregation by country, job and segment of the economy
12.	from signalling	to	job competition	to	
13.	from market discrimination	to	segmentation	to	
14.	from supply	to	demand	to	supply-demand interaction
15.	from schooling investments	to	training on the job	to	
16.	from training on the job	to	recurrent education	to	alternating school-work experiences
17.	from economics	to	sociology	to	social psychology and anthropology
18.	from economics and to sociology	to	politics	to	
19.	from the formal sector of education and work	to	Nonformal education and Informal work	to	Education and Work created as continuous not discreet variables

Figure 2. (continued)

20.	from Blackbox model of Education and Work	to	Look inside the Work box	to	Look inside the work and education boxes simultaneously
21.	from	Education Blackbox	to	Key role of Examinations	
22.	from	Job getting	to	Job Productivity	
23.	from	Job getting	to	Job Creation	
24.	from	Diversification of Technical & Vocational Training	to	Integration	
25.	from	Technical/Vocational to supply	to	Quality	
26.	from	Employed "persons"	to	Employment/Income Generation for Women	
27.	from	Direct Effects of Education on Income & Employment	to	Indirect Effects	
28.	from	Innovation, Experiment, Pilot	to	Ordinariness	
29.	from	Education and Employment	to	Learning and Working.	

Little 1978, Hallak and Caillods 1980, ILO/JASPA 1981a, b. 1982, 1983, Somerset 1982). This emphasis on skill has found its most practical expression in the ILO programme on Modules of Employable Skill (MES), an approach to vocational training based on the actual skill requirements of each job. These skills are ascertained by using conventional job evaluation techniques to delineate the groups of activities into which each job can be decomposed. Each activity forms the basis for a module of employable skill. This approach is intended to be universal and flexible. Learning elements are self contained instructional booklets each covering a specific learning objective. It is an exciting approach but answers to the following questions may be required before its wholesale adoption :

Is MES a truly international training system appropriate for all developing countries?

To what extent are skill requirements of rapidly changing technologies being constantly transformed?

Will the introduction of MES result in a large increase in the demand for training in all types of enterprise?

Is MES an effective pedagogic technique that can be used by all types of worker, especially those who have received only basic education?

Is it the case that MES leads to immediate and substantial productivity increases and is less costly than conventional institutional-based training programmes?

Is MES equally applicable to both limited and broad skill formation?

Will the principal source of training demand be for limited skill occupations?¹

1. I am grateful to Martin Godfrey for these suggestions.

7. From Efficiency to Income Distribution to Economic Survival.8. From Income Distribution to Employment to Economic Survival.

The initial question asked of education was how profitable an investment is it? Then people asked does schooling act as an equaliser of income or as a transmitter of the status quo from one generation to the next. Then the question was asked how is income obtained? "Many people feel better off if they earn their income rather than receive it in the form of a transfer from the rest of the population" (Psacharopoulos 1978, page 13). While employment will continue to dominate the concerns of the privileged in third world societies and the mass of the population in first world countries, income distribution will probably feature less as a concern among both groups. The concerns of the mass of the population in the rural third world will turn to survival especially food survival. By contrast there seems among some first world governments and aid donors to be a swing back to the concerns with efficiencies and growths.

9. From Social Efficiency to Private Choice to Social and Private Costs.

Psacharopoulos notes a change away from estimating the social profit to investment in skills towards a comparison of the private costs and benefits from the individual's viewpoint. Whereas the social efficiency focused on social costs and social benefits and private choice focused on private costs and private benefits, much of the discussion about the financing of education today focuses on how to save on social costs and how to transfer social costs to private costs. (Stromquist 1982, Weiler 1983.)

And in the sphere of work there is increasing interest in the cost of training, though of course this interest has been around for some time (Zymelman 1973, Godfrey 1975, Borus 1977).

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| 10. <u>From social productivity to screening.</u> | } to | The testing of theories and disaggregation by country, job and segment of economy. |
| 11. <u>From screening to signalling.</u> | | |
| 12. <u>From signalling to job competition.</u> | | |
| 13. <u>From labour market discrimination to segmentation.</u> | | |

These four shifts are grouped together because they represent a spate of competing theories - but competing as an explanation for what? The debate really got going in the early seventies with Blaug's (1972) paper on The correlation between education and earnings - what does it signify? There we were presented with economic, sociological and psychological theories of one of the best empirical generalisations in the economics of educational literature. Some of these theories were of a classical human capital kind - schooling creates and develops cognitive and even non cognitive skills. Then there was a variety of screening theories. Some were of what I call a hard screening type - schooling does nothing to change the individual, only to select according to pre-existing quality/skills, whether those skills be of a cognitive or attitudinal nature. Other screening theories were much softer and seemed to be saying only that the school acts as a filter, without answering the more fundamental question of whether the filter was simultaneously developing the person or simply developing an already developed person. To a psychologist this is a very important question, perhaps to an economist less important. The debate continued with considerable refinements and development (Dore 1976a, Wiles 1974, Carnoy 1975b, Bowles & Gintis 1976). Some of the theories were about why more education led to more income, some were

about why education made people more productive which led to more income, while others were about why does income distribution remain the same or get worse when education opportunities become more equal? The focus was on employers and their behaviour (screening, signalling and job competition) and on the structure, apparently immovable, of the labour market and jobs (segmentation). The early and mid seventies were characterised by theory generation. In the late seventies the theories were being tested and the results published (for example see Pang Eng Fong and Liu Pak Wai 1975, Sanyal and Versluis 1976, Brooke, Oxenham and Little 1978, Deraniyagala, Dore and Little 1978, Oxenham 1980, Hallak and Caillods 1980, ILO/JASPA 1982, 1983). The major conclusion of the empirical studies designed to test the validity of the competing theories is that some explanations are more important in some countries and in certain sectors and sub sectors of the economy at different points in time. In other words there is an interaction between best explanation and country, time and type of labour. Hallak and Caillods conclude after their synthesis of work in Panama, Indonesia, Kenya and France on the relationship between employment patterns, sector of activity, production system, firm size, market position, legal form and degree of autonomy that:

"despite the fact that employment patterns vary ... in relation to the sector, the variations within one and the same sector are such that it is not possible to give reliable and significant utilisation coefficients for each sector for a given category of worker" (Hallak and Caillods 1980, pg.13)

Their analysis of recruitment policies pointed to a variety of cognitive and ascriptive elements by job category and to a variety of pre-career versus in-career training needs by job.

One policy conclusion that could be drawn from their work is that a skill-recruitment-training profile needs to be created for every job (rather than career) which could in turn encourage an extremely static rather than dynamic work force.

"The crux of the debate concerns the criteria for developing a modern work force and comes down to the question of whether it is enough simply to increase the correspondence between training and work or whether on the contrary one should maximise the choices and the individual's occupational mobility by putting the emphasis on a very wide general training ..." (Hallak and Caillods, 1980, p.25)

In their study of manufacturing workers in Singapore, Pang Eng Fong and Liu Pak Wai (1975) contrasted labour market segmentation and human capital explanations against data on output, sales, capital structure, job structure, hiring policies, preferred qualifications for jobs, promotion policies and training offered to employees in a variety of organisation. They concluded that the labour segmentation model supplements the human capital perspective but does not substitute for it.

In their research on modern sector labour markets in Mexico, Sri Lanka and Ghana, the IDS research team found that employers in Mexico were behaving more in accordance with human capital theory. This was linked to their greater degree of vocational/specialised courses at tertiary level than in Sri Lanka and Ghana. However, there were elements of benign streaming and segmentation in all three countries. Of seventy employers in the three countries, not one had tried systematically to determine why a given educational qualification was required for a given job. Qualification escalation was apparent for many if not most non-manual jobs.

Either it was just that people with more education were available or else so many educated people were available that the employers had to ask for higher qualifications to keep numbers down to a manageable size. There was also some evidence that when qualifications were first attached to given jobs then a Human Capital rationale lay behind the link - a particular level of education was thought to indicate certain skills required in school - but thereafter the link was forgotten.

The next few years are ripe for a synthetic theory capable of explaining the link between education level, the quality of skills (academic vocational, general , specific) lying behind the same and different education levels, labour market, entry, promotion and mobility, the impact of different types of learning and experience, income levels, productivity levels, lifetime earnings, lifetime productivity, income distribution, status distribution etc. We still have some way to go!

14. From Supply to Demand to Supply-Demand Interaction.

To some extent the shift from human capital investment to labour market segmentation summarised the shift from labour supply to labour demand. In the first case it is the quality and supply of labour that determines economic activity and growth. In the second, it is the quality and structure of economic activity and growth that determines the supply.

During the seventies the demand-side arguments were in the ascendancy with the structure of the economy and labour market determining not only the quantitative supply of labour but also the qualitative (Little 1977, 1978 c). The demand-side arguments are still in the ascendancy, with the demand factors

operating at the international (e.g. recession) level as well as the national (e.g. exchange rate policy). The implication of the demand side arguments are that education can do little until the constraints of the current economic crisis, the new technology and the international division of labour are improved. Such arguments leave the education system, the individual person and the social groups impotent, alienated from society. The irony is that many of those who argue that economic and technological factors determine the amount and quality of education are the same people who argue that the demand factors will change only when supply makes demands of the demand! This is the classic contradiction in the Correspondence Principle advanced by Bowles & Gintis (1976), among others. Changes in the nature, quality and quantity of education and training systems are brought about not from within but from without, from the economic, social and technological structure of society and the world. So what can we do about it? Chapter 11 in their book urges us to change the situation through education! Power is restored to the individual and the group.

Similarly, in his chapter 'Rethinking the Relationship between Work and Education', one author claims both that 'where transformation of educational structures have occurred, the changes have usually come from outside' and 'we need to study the contribution of education in bringing about changes in these (production) relationships... what should be of interest ... is the general purpose and the framework within which education experiments are carried out, the struggle to reverse the tendency of education to increase the dependency of individuals and of entire peoples' (Gelpi 1979).

In a similar vein the Diploma Disease argument (Dore 1976b) - widely misinterpreted as an argument against education and a description of qualification escalation - is essentially one of the unreasonable demands placed on the education system by the economy and a plea for better quality learning for all in all systems so that change, innovation and independence of individuals and entire peoples can be brought about. An interactive model of education and work simultaneously assimilating each other and acting on each other - or of supply and demand supplying and demanding of each other - is called for.

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| 15. | <u>From Schooling investments to Training on the job</u> | } to alternating school-work experience. |
| 16. | <u>From training on the job to recurrent education</u> | |

On-the-job training is regarded conventionally as informal education. One learns incidentally while performing a job. Recurrent education is more formalised and would probably be regarded as non-formal education. The training is run outside the formal education system but the learning is structured with prescribed curriculum and learning and teaching methods (Stoikov 1973). Both ideas are gaining currency in the sphere of work and education. There is an increase both in employers taking part in training schemes especially in the first world (U.K. MSC 1982, Allum & Quigley 1983) and an increase in the number of education systems attempting to build work experience and practical studies into their school curricula, despite the difficulties encountered, throughout the past two decades (Staley 1973, Lourié 1977, Shirk 1978, Morsy ed. 1979, Sinclair 1977, Wanasinghe 1982, Van Rensberg 1983, Lacey and Hassenden 1984). Morsy ed. (1979) synthesizes a number of writings on the theme of learning and

working. He refers to the malaise of education gravitating towards

"the junction of certain contradictions which people have not sought or dared to face squarely: the hand/mind divorce; the school/real life separation; the immutable, irreversible cycle of education/work/leisure/retirement; the imperturbable production and reproduction, by the socio-educational systems of generations divided into white-collar workers and draught horses; the gulf between the end of the student universe and integration into life; between the intellectual training received and the first job; between the value system of young people at school and that of adults at work. All these contradictions reinforce social segregation, inequality between generations and even within a single generation ..."

From this eloquent if pessimistic beginning the subsequent papers attempt to tease out straws of optimism. In his concluding remarks, Ahmed points to the social and economic system of rewards as the core problem and suggests that the success of school production units lies in their "genuine income earning work instead of contrived experiences and symbolic features as in many schools which added a 'practical course' to their existing curricula". (Morsy (ed) 1979 p.343)

Similarly the success of schemes for young people who live most of their time in the world of work rather than the world of learning depends on the results they bring. The funding of work schemes and the income benefits for recipients is crucial. The Fiji National Youth Council (FNYC) has produced a brief, but useful (and especially so because it is brief) account of the FNYC loan fund established in 1974 with practical recommendations for its reform (Viriki 1976). Similarly, Iskander, Moulton and Sihombing (1982) have produced a useful account of a learning fund project in Indonesia which aims to give work opportunities, skill and access to capital to the very poor and unskilled,

especially those aged 12 to 25 years.

This alternating learning and working is now termed by many Alternance Training (Koditz 1981, Jallade 1982, Harrison 1982). The study by Koditz (1981) of European Economic Community member states distinguishes between three traditional status situations for young people - student, apprentice, and employee - and points to a new major group which has emerged in EEC countries in response to the growing problem of youth unemployment. These are unemployed young people in job induction and work integration schemes. Comparisons are made between the EEC countries of the types of financial assistance/rewards to which young people gain access and of their legal rights of representation/industrial participation, a theme also discussed elsewhere by the Geneva Informal Meeting of International Youth Non Governmental Organisation (1976). Secondary school students have limited rights of representation, though students in higher education fare better. Two models of student representation are apparent. On the one hand there is the model of group representation on university bodies (eg. the Federal Republic of Germany, Italy). On the other hand there is the student union model of the U.K. and Ireland. Secondary school student financial support ranges from no support to some support (at a level insufficient to cover living costs). Part-time/vacational employment is becoming increasingly important to secondary school students, though this employment tends to be lower in areas where unemployment is high.

In higher education, in most EEC countries, financial grants are means tested with the exception of Denmark where grants are awarded to students over 22 regardless of income. In a

number of countries students still have to pay a direct contribution to tuition fees. The maximum level of living costs grants for students living away from home varies from 33% of the average industrial wage (Germany, Netherlands, U.K.) to 9%. The legal status of apprentices varies considerably among member states. In some the apprentice is regarded as a trainee, in some the apprentice is trainee and worker, in others the apprentice is regarded as a worker. The more the status approximates that of a worker the higher the wage. The distribution of apprentices across sectors also varies considerably. In Germany, Denmark and Luxembourg for example apprenticeship is important in all sectors. In the Netherlands, Ireland and the U.K. apprenticeship is limited to the secondary sector and predominantly male professions. In Belgium and Italy apprenticeship is concentrated on craft trades and smaller enterprises. The new schemes designed to induct young people into work have resulted in new ambiguous legal situations. There appears to be three main types of work integration status - (i) student status, where the scheme is run by the state education system, (ii) trainee status where work programmes are conducted at plant level and (iii) employee. A common problem is emerging in all member states - that of competition between similar job induction schemes and between them and other forms of training. Schemes carried out by the state tend to be financially less attractive than schemes offered by employment services.

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|---|---|
| 17. <u>From Economics to Sociology</u> | } to Social
Psychology and
Anthropology |
| 18. <u>From Economics and Sociology to Politics</u> | |

Psacharopoulos notes two parallel research emphasis shifts from economics to sociology and politics. The traditional concerns of the sociologist (occupational status and inter-generational mobility) and the political scientist (perpetuation versus change of the class structure) combined with economics to engage in debate about the role of education. However, running through work in the later seventies and early eighties strands of other social science disciplines become entwined. The work which examined employers' behaviour, recruitment, selection and promotion practices, worker characteristics, measurement of skills and selection tests inevitably borrowed from occupational and social psychology (see for example Bowles and Gintis 1976 discussions of worker characteristics, dependency, alienation, job satisfaction, intrinsic and extrinsic motivation). Work on recruitment practices, job functions and job qualities borrowed from standard procedures of occupational psychologists (e.g. see Brooke, Oxenham and Little 1978) while measures of modern sector worker productivity borrowed from George Kelly's Psychology of personal constructs. (Kelly 1956). Anthropology too influenced the techniques (if not also some of the questions asked) adopted in the study of the informal sector (e.g. see King 1977). The 'key informant' is central to the ILO's new Key Informants System (cf pp 41) designed to improve information about the economy and training needs in rural areas and the third world. Anthropology and psychology both have guided research methods and research questions in studies of community and school responses to labour market demands (Boakye

and Oxenham 1982, Brooke and Oxenham 1981), occupational and educational expectations (Little 1980a, Kahn 1981, Meersseman 198 , Costello and Costello 1982), vocational orientation (Gahbler, Pezaro and Schonmeir 1981), job search (Willis 1981, Verhine and Lehmann 1982, Jenkins 1983) and selection (Little 1983, 1984a).

Most recently the work of the Students Learning Orientations Group (SLOG) borrows heavily from social psychology in its longitudinal study of student sections of learning motivation and its long-term impact on work motivation. (SLOG 1984)

19. From Formal Sector Education and Work to Non-Formal Education and Work to the Dependence of Non-Formal and Formal.

In the post-independence era in the Third World, development policy and planning focused on the indigenisation of workers in the modern sector of employment and in the expansion of the formal education system. In the seventies, as it became apparent that the modern sector economy could not absorb the number of educated youth seeking work and, equally the education system could not expand at the rate demanded by the populace, attention turned to non-formal education and informal work as solutions. According to economists the potential for employment in the informal sector of work was infinite and the costs of non-formal education very low (Paulston 1972, Coombs with Prosser and Ahmed 1973, Ahmed and Coombs 1975, King 1974, 1975, 1977, Unesco EPP 1977a, b, Iredale 1978, ACEID 1978, Niehoff and Neff 1977, San Giovanni, Armstrong and Jansen 1981, Osterling and Persson 1982). More recently there has been a trend, especially in the employment literature to regard

the formal and informal work sectors as dependent on each other rather than separable from each other. The formal sector sub-contracts work to the informal sector and any individual person may weave his or her way in and out of both learning and earning in both, the informal sector being somewhat less privileged than the formal (King 1977, ILO 1980, Allen 1982). Similarly, much of the discussion about the role of women's work in the informal sector emphasises its dependence on and exploitation by the larger enterprises in the formal sector (Young and Moser 1981, Goonatilake 1980, Blake 1980). The work on Nonformal Education is perhaps less clearly characterised by a similar conceptual shift, though the seeds have been there for some time. Foster's (1965) Vocational School Fallacy stated very early on that the vocational school was a second fiddle to the mainstream academic school. The problem with thinking about non-formal education lies in the diversity of what is described as non-formal education. It includes employment oriented programmes for adults (some of whom are literate, some of whom are not), and adult literacy programmes for people ranging in age from 15 to 65 who have never been to school, and literacy and skill programmes for the under 15s. Many non-formal education programmes have a work component. Muro (1977) has abstracted examples of work components in non-formal education programmes in Africa. Even then five types of programme are distinguished: industrial and vocational pre-employment training; industrial and vocational on-the-job and skill up-grading; programmes for out of school youth in rural areas; programmes for adult populations in rural areas; and multi-purpose programmes.

The problem lies in trying to aggregate an amorphous mass of different programmes and activities into the same concept. By itself the term means little. Disaggregated, the programmes have much to recommend them. Cassassus (1977), after reviewing nine country experiences which have been successful in integrating work experience with education, concludes that a dual formal/non-formal system of education works against equality. Non-formal schemes, he argues, are marginal solutions - the only possibility for them to become a powerful instrument in solving major issues is that they become more 'formal' and massive.

20. From Blackbox models of education and work to looking inside the work box to looking inside the work and education boxes simultaneously.

The earlier way of thinking about education and work is reminiscent - though just a little more sophisticated - of the way behaviourist psychologists in the 1930s viewed the individual. The individual was a black box who received a stimulus (input) and who responded (output). No-one questioned how the individual received, constructed and re-interpreted the input. Similarly, education was a black box into which you injected resources and uneducated young people and out came the outputs - educated products. Work too was a black box. Initially there were people who entered the labour market and later there were types (ordered by educational level) of people who entered the labour market (inputs). And there was a gross national product (output) at the end of the day.

During the mid seventies the work box came under scrutiny. Why do educated workers earn more? Why do employers prefer

educated workers? Why do employers allow qualifications to escalate? What is it about the structure of work that prevents worker mobility? Why do women workers earn less than men for identical work? Attention focused on the process of getting work, of working and earning. A focus on the process of learning and education was less evident in the same body of literature. Certainly this was a focus in the sociology of education in the West - but the sociologists and economists of education and the sociologists and economists of work in the West are usually two different people who inhabit very different territories. In the development literature few writers straddle both spheres of activity, and were as confident inside classrooms as they were in personnel departments, factory floors or car mechanics' sheds - though there were exceptions (Oxenham (ed.) 1984, King 1980, ILO/JASPA 1982, 1983, Jenkins 1983).

21. From the Education Blackbox to the key Role of Examinations

If there is a move in the eighties to looking inside the education and employment boxes simultaneously, it is vital that those lines which link both are also subjected to scrutiny. The key link is the examination system and one which has been taken for granted both by employment and manpower planners (this job requires this qualification) and by educationists and education planners (our school system is more efficient if we achieve higher grades). It also deserves closer scrutiny. One can argue that since examinations and selection systems are such a vital life line for both the world of work and education, then its quality will have an impact

on the quality of life in both worlds. This is true for technical and vocational qualifications as well as academic qualifications and as true for non-formal as well as formal education. The type of exam will determine the type of achievement. Exams have the potential to reinforce and contradict curricula. Curriculum reforms not reinforced by examination reform will have little chance of survival.

A body of work focusing on the quality of examination and selection systems is emerging (King 1971, Little 1978, Lewin 1980, Brooke and Oxenham 1980, Valisno 1980, Vulliamy 1981, Boakye and Oxenham 1982, McNamara 1982, Adiseshiah in Sanyal 1982. ILO/JASPA 1982, 1983, Little 1984a/b, Oxenham ed. 1984)

22. From Job Getting to Productivity

23. From Job Getting to Job Creation

The focus in the early seventies on educated unemployment meant that the getting or not getting of a job was a key dependent variable. That concern seems to have fragmented into two different but related concerns - job productivity and job creation. How productive are different levels of educated worker once they have achieved their job? These studies are generally linked with the theory of human capital. One of the basic assumptions is that income reflects the productivity of the worker (Leonor 1976, Godfrey 1977, Little 1984 c).

Job creation is the second strand. Neither academic nor vocational education per se will create jobs (Godfrey 1974,

Pangputhipong 1979, Rayappa and Grover 1980, Wilms and Hansell 1982). To some extent this is the same concern which fuelled interest in the Informal Sector in the seventies. But whereas much of the work then was on the urban informal sector, the focus now includes the rural sector, particularly the rural off-farm sector, (Schiefelbein 1979, Court and King 1979, Bude 1984), though skill training for the rural areas is often more difficult than in urban areas (Ople 1977) with courses out of line with local needs (Gill 1977, Gorham 1982). Of course rural income and employment have long been the interests of rural developers and agricultural economists and those working in non-formal education. But for those working on the education-employment link, rural education and rural employment have been a lesser concern, with some exceptions (eg. Commonwealth Secretariat 1976, Colclough and Hallak, 1975).

A list of problems encountered by educationalists working in rural development written nearly two decades ago in 1967 is current (FAO 1976). These were listed in a report on agricultural extension programmes for sons and daughters of small farmers and agricultural labourers. The problems included:

Limited financial resources

Lack of understanding and support by planning officials
and policy makers

Lack of effective cooperation and coordination among
organisations

The need for effective evaluation and research and for
sharing results

Ineffective use or absence of rural use sponsoring committees
at all levels

Lack of clear-cut authority and responsibility among
agencies and organisations concerned

Shortage of full-time rural youth staff

Low salaries

Inadequate self transportation

Limitations in volunteer leader selection and training

Limitations in training materials, support and incentives

Lack of material resources or credit for youth work projects

Lack of materials and facilities for spreading information to isolated rural youth

Ineffective use of learning by doing

Lack of relationship of youth programme to national development plans

Lack of relationship of work programmes to available marketing opportunities

One hopes that there will not be a further proliferation of studies of failure and constraints. There is sufficient repetition in the literature to obviate the need for yet more studies. The challenge is to do something to change the situation.

24. From Diversification of Vocational and Technical Training to Integration.

Much was written during the seventies on vocational and technical training. Some felt that the problem of mismatch between students' expectations and jobs would be solved if students followed technical and vocational courses better suited to the needs of the economy (Bezanon 1974, Lehmann and Verhine 1982, Lillis and Hogan 1983). The merits of diversification of the secondary school curriculum and the separation of vocational and technical from academic schools were compared with the integration of these courses into a common

core curriculum. Towards the end of the seventies Unesco published an overview of technical and vocational education systems in twenty-three developing countries (Unesco 1978). The report covered educational systems, policy planning and administration, phases of technical and vocational education, implementation and trends in innovation. Two major innovative trends were identified - the first was the integration of technical and vocational education with general education and the second the development of post-secondary technical education (see also Diez Hochleitner, Ten Artigas and Garcia Cuerpo 1981, Avakov and Chuprunov 1981, Podoski and McCabe 1974).

The theme of integration is also apparent in the call for parity of treatment between students following courses at technical training institutions and those following academic courses in the formal school system, as for example in Sierra Leone JASPA 1981c. Some however would argue that vocational/technical training should be separated entirely from the education system and handed over to the work system (Keeves 1981), whereas others call for yet more coordination between Ministers of Labour and Education (Cabral de Andrade 1978, Barbagelata 1980).

25. From Technical/Vocational Supply to Quality of Technical/Vocational Training.

In the literature generally there is a shift towards considerations of the quality of learning and education. In a recent discussion on cooperation in vocational and technical education in Asia, a shift towards considerations in the quality of technical and vocational training was also apparent (ACEID 1979, Jennings-Wray 1982).

26. From Employed "Persons" to Employment/Income Generation for Women

Most of the literature on education and work refers to male persons. This to a large extent reflects the employment situation. Males are employed more often than females. Males do earn greater incomes. It is also interesting to reflect that the term Manpower Planning is also appropriately named. However, there is an increasing and welcome literature on women - their opportunities and lack of opportunities in formal employment and self-employment (Commonwealth Secretariat 1977, ILO 1979a, Griffin 1980, University of Dacca 1980, Schiefelbein and Farrel 1980, Lechte 1980, Skjonsberg 1982, Tellis-Nayak 1982).

27. From Direct Effects of Education on Income and Employment to Indirect Effects.

Until recently most thinking about education and income and education and employment has been of a direct kind. The education sector and economic sector impinge on each other. But what are the indirect effects of education on income and employment via other factors, for example health? Does education per se have any impact on health? Does improved quality of health improve income and employment levels? There is an increasing recognition of the mutual dependence of different sector activities (ILO JASPA 1981, Seers 1981, Lewin, Little and Colclough 1982, 1983, Colclough 1982).

28. From Innovation, Experiment and Pilot to Ordinariness

This forecast comes from King's review of current experience in formal and non-formal technical education and training.¹

1. K.King, Review of Current Experience in Formal and Non-Formal Technical and Vocational Education and Training. Mimeo, Ottawa 1983.

In his conclusion he notes that the words and phrases learnt slowly and painfully in the nineteen sixties and seventies should be able to assist in the better provision of training in the 1980s. The words and phrases include indigenisation, ordinariness, recurrent cost, local participation, community knowledge, participatory communication, local language and learning from locals.

Not many innovative pilot projects assisted by lavish external funding survive into the 1980s. There is a possibility that this decade's rural training initiative will be much more ordinary and perhaps as a consequence much more widespread. (King 1983, p.10)

The stress on building on the existing situation is also emphasised by Niehoff and Neff (1977) in their review of the field of Non-formal Education. They review developments in an extremely wide range of countries and local situations and draw out some key operational generalisations. They emphasise the wisdom of the villager, respect for cultural values and norms, use of indigenous social organisations and local leaders, development workers must have something useful to offer, the numbers of paraprofessionals need to be increased, literacy is not a prerequisite for the conduct of non-formal programmes, communication systems and information flows deserve attention.

There is certainly enough experience in the fields of non-formal education, informal work on the one hand and in technical and vocational education on the other to be able to formulate practical and specific proposals. Some of the most practical reviews and perhaps also the most ordinary stem from local areas written by local writers or persons involved in the area over long periods of time (Valisno 1980, Action Study Team Lesotho 1976, Central Board for Workers Education, India

1978, Indian Planning Commission 1979, Inger 1976).

29. From Education and Employment to Learning and Working.

In point 4. in fig. 2, we noted a shift in emphasis from employment to work. In conclusion, I would like to combine that with a shift from education to learning. It has often been pointed out that education and schooling are not the same thing (Richmond 1975, Dore 1976b). So too, education and learning are not the same thing (ILO 1981, Seers 1981, Morsy 1979). Education is the means through which the student attains his or her objective - learning. Learning places the student at the centre of the education process and encourages to ask what has he or she learned? This takes us back to our earlier discussion of the change in the classification of labour from homogenous labour to heterogenous to superheterogeneous labour. What skills lie behind a certified level of education?

METHODS FOR STUDYING THE EDUCATION-EMPLOYMENT INTERACTION.

In this section we review new developments in the methods available for studying the education and employment link and for improved planning. There is a distinction to be drawn between research methods and planning methods. Researchers often enjoy a luxury of time and resources which planners and policy makers do not. Our focus here will be on the planner and policy maker on their methods and what they can learn from research methods. We deal in turn with

Manpower Planning

Rate of Return

The Basic Arithmetic of Youth Employment

The ILO Key Informants System

Local Manpower Planning

Rapid Rural Appraisal

The Use of Existing Information

Educational Planning

Manpower Planning versus Rate of Return

Throughout the sixties and seventies there was much heated debate on the relative merits for the planning of education of the manpower approach versus the rate of return or cost-benefit approach. The 1980s, it seems, is a period of reconciliation (Psacharopoulos, Hinchliffe, Dogherty and Hollster 1983). A summary of the two approaches is presented by Psacharopoulos et al (1983).

- According to the manpower requirements approach, the gains resulting from the expansion of education come from the ability of the economy to achieve certain increased levels of supplying skill requirements once production targets have been decided upon. Without the production of these skills it is argued that planned levels of output cannot be reached. Education targets are thus linked directly to specific production targets.
- According to the cost-benefit approach, efficiency gains result from educational expansion if the social benefits exceed the social costs (at an appropriate rate of discount). This approach is framed in terms of the relationship between the costs of education and the resulting increased productivity of graduates in whatever economic activity they work. In considering the further expansion of education it is argued that if the rate of return is above the rate set as the criterion for government investment, this can be interpreted as a signal to expand, and if lower, as a signal against expansion or for contraction.

The theoretical weaknesses of both approaches have been widely discussed (e.g. see Jolly and Colclough 1973). Typically the criticisms of the Manpower Planning approach include:

- zero labour substitution is assumed, that only one combination of education and training is possible for a given occupation;

- most manpower plans have and continue to focus on wage employment in the formal sector to the exclusion of all other forms of economic activity;
- manpower plans are growth oriented and few integrate objectives of equity or social demand;
- there are huge discrepancies between the actual rates of economic growth and the assumed ones upon which the manpower forecasts are based;
- occupational mobility is neglected in the technique and the greater the mobility, the less accurate are the forecasts;
- countries at similar levels of economic development have experienced diverse educational and occupational structures

The starting point of the IIEP Research programme on Education and Work was "the inadequacy of the methods followed in the planning of human resources ... (and) the need for a particular effort for developing new methodological frameworks or adapting the existing ones" (Hallak and Caillods 1980 p.9).

After their studies of Panama, Indonesia, Kenya and France they concluded that in order to be able to estimate the trend in the employment of human resources one would need at least (i) to have different employment pattern factors (utilisation coefficients) per sector and per type of firm; (ii) to make assumptions concerning future trends in the structure

of the economy per sector and type of firm, and (iii) to assess the effects of these trends on the trends in the employment pattern (Hallak 1978, Hallak & Versluis 1978, Hallak & Caillods 1980 p.13). However, although these are the recommendations, they have not yet been worked through in practice. It is easy to criticise Manpower Planning. It is less easy to adapt the technique (see also Colclough 1978 on the IIEP studies of Manpower Planning and Higher Education).

Typically the criticisms of the rate of return and cost-benefit approach include:

- the assumption that differences in earnings between persons reflect differences in productivity;
- the insistence that opportunity costs be included in the cost side of the equation. Opportunity costs are the earnings foregone when the person undertakes education or training. It would seem in many circumstances that opportunity costs are zero because there are simply no opportunities for income generation;
- Inability to show that the higher earnings of the higher educated are caused by that education;
- the use of cross-sectional data to infer longitudinal lifetime trends;
- the inability to be able to forecast manpower requirements;
- the difficulty of drawing policy conclusions (for example, if the social rate of return to investment in primary education is higher than secondary education, does this imply (i) you should invest in more primary education and slow down investment in secondary education? (ii) that

the costs of primary education are too low and you should invest in more expensive primary education?

(iii) the costs of secondary education are too high and you should invest in less expensive secondary education?

(iv) the returns to primary education are too high and the state should intervene to depress incomes?

(v) the returns to secondary are too low and the state should intervene to raise incomes?)

The reconciliation between the approaches is forged partly because of a mutual appreciation of limitations, and because of a recognition that educational development has a range of goals which go beyond either approach.

"It may be more productive for manpower/ education planners to spend time in other areas than making manpower forecasts or fully fledged cost benefit calculations. Such areas would include a major concern with internal efficiency, cost effectiveness, rationalisation of competing trainee models, subject or curriculum bias balance, teaching effectiveness, the timing of irrevocable decisions on specialisation." (Psacharopoulos et al 1983, p.19)

However, this advocacy of a broader approach and use of a wider range of techniques requires a discipline of its own. This discipline is provided by a continuous (not one-off) framework for analysis and policy making in the form of an annual routine which is a specific set of tasks designed to continually monitor labour market conditions. These tasks are grouped around the headings of administrative capacity, information flows, efficient use of existing resources, enrolment policy and other policy issues. This approach has implications for lending agencies. It seeks to build on and improve the borrower's planning capacity. This probably implies that there will be

a down-playing of formal analysis by the lender and will encourage the lender to move away from discreet projects. In his chapter in the same volume, Hollister outlines what he thinks are the major manpower analysis issues in most low-income countries. He classifies the issues by level of Manpower (high, middle, low, special) and by sector (Private, Public, Education). These issues are summarised below in Figure 3.

Figure 3. Manpower Analysis Issues (from Psacharopoulos et al 1983 p.71)

<u>Level of Manpower</u>	<u>Sector</u>		
	<u>PRIVATE</u>	<u>PUBLIC</u>	<u>EDUCATIONAL</u>
High	Wage scales; use of expatriates.	Separate sub-sector analyses for prof. & tech. Wage scales	Teachers Overseas higher education
Middle	Wages, turnover; training; emigration	Wage structure	Vocational education in science/non-science
Low	Population; labour force; unemployment; rural-urban; immigration-emigration	Agriculture; poverty groups	
Special	Construction sector; regional studies; computers		

Two other issues cut across this list and across the conventional manpower planning/rate of return debate. The first is a distinction between need and effective demand (Godfrey 1979). In assessing the efficiency of an education system and training system, care has to be taken over one's choice of criteria. In one sense the system is regarded as efficient if it responds flexibly to changes in the labour market to ensure a

continuing balance between demand and supply. But education and training systems are usually asked to do more than this - not merely to respond to the pattern of effective demand (determined largely by high income earners in urban areas), but also to relate to the variously defined needs of an economy in society, where the starting point for planning is not the existing distribution of purchasing power but the existing distribution of unsatisfied needs, mainly among the rural poor. Godfrey explores the distinction in relation to training in Kenya and derives different policy measures that would be necessary to increase the system's efficiency in relation to the market and those concerned with improving its efficiency in meeting needs. This distinction cuts across both the conventional manpower approach and the rate of return approach because whereas the rate of return approach is oriented towards effective demand, the manpower planning approach is based on needs defined usually for the modern and not rural sectors of employment. A second issue concerns the manpower debate in Developed versus Developing Countries.

We should note in passing that the Manpower Planning Debate in Europe has taken a slightly different form from that in developing countries. Whereas much has been written about Manpower Planning versus Rate of Return in the Third World context, in the First World especially Europe, the debate has been about manpower requirements versus social demand for education, especially higher education. Where rate of return studies focused on the social and private economic benefits to society and students, the social demand approach refers to those students who are qualified and who want higher education, for whatever reason.

It was a key concept in the 1963 Robbins Committee Report which attempted to assess the demand for and the need for expansion of British higher education (Fulton and Gordon 1979, Fulton, Gordon and Williams 1982).

The Basic Arithmetic of Youth Employment

The Basic Arithmetic method is a straightforward technique involving no more as the name suggests than basic arithmetic (Dore, Humphrey and West 1976). It is a technique which can be used to estimate the size of the job aspiration - job opportunity gap. It is an especially useful technique for ministries of education, ministries of labour and ministries of planning. It was developed in response to the need to estimate the size of the problem of educated unemployment in the seventies. It is based on age cohorts and on a comparison of the proportion of each age cohort with primary and secondary school qualifications with the proportions for whom there are modern sector 'jobs' available. Estimates are made of potential labour market entrants, working age population and new vacancies in the modern sector (based on the total modern sector labour force, numbers of non-manual workers, death and retirement rates, economic growth). The final calculation is the accommodation rate - that is new vacancies as a proportion of school outputs.

The exercise is being conducted for a diverse range of twenty five countries (Dore, Humphrey and West 1976), for the Yemen (Sinclair and Socknat 1977) and in a modified form for four developing and three developed countries (Little 1978a, 1980) and for Nigeria (ILO/JASPA 1981d).

The ILO Key Informants System (KIS)

The Basic Arithmetic technique focuses on the number of jobs available in the modern formal sector of employment and the accommodation rate (new vacancies as a proportion of school outputs). The ILO Key Informants System (KIS) focuses on the informal sector especially in rural areas. Six countries are currently participating in the KIS pilot projects - Bangladesh, India, Malaysia, Sri Lanka, Nepal and Thailand (see for example National Foundation for Research on Human Resource Development 1982). KIS offers a complementary approach to existing manpower and employment information. Key Informants (a sociological-anthropological term) in rural areas provide household information on present economic activity, income levels, potential employment, future training and capital requirements in villages. The Key Informants are drawn from different social strata and different levels of the development administration - villages, thana-level offices, sub-divisional offices and district level offices. It is suggested that this information can usefully be fed into the lowest level of decision making (e.g. gram sarkar) and can assist the design and implementation of development projects.

Local Manpower Planning,

KIS offers the beginnings of one approach to local manpower planning, especially in rural areas. Within conventional manpower planning there are many examples of local and regional analyses of the wage employment sector (Nigeria 1979a, b). Other approaches are also in their infancy but hopefully will develop rapidly into usable techniques over the next few years. Court and King (1979) discuss education and production

needs in the rural areas of Tanzania and the means for incorporating village needs into the national system of manpower planning, emphasising that if the concept and rhetoric of village manpower development is to be given substance there must be local community control of work, employment and education. Elsewhere King (1980) introduces a number of useful categories for the planning of self-employment. These are summarised below in Figure 4.

Figure 4. Useful categories for the planning of self-employment (after King 1980).

<u>Self Employed</u>	Subsistence self-employment vs. entrepreneurship self-employment (reintegration of youth into ordinary village life) (increased penetration of the cash economy)		
<u>Employed in formal sector</u>	Permanent Worker	vs. Permanent Casual Worker	vs. Contractors labour vs. Casual temporary or daily labour
<u>Employed in the informal sector</u>	Apprentice	vs. Casual Worker	vs. Journeyman
<u>Type of enterprise</u>	multinational/ parastatal/ public	vs. large/medium/ small local firms	vs. cottage, home industry

Elsewhere, on the training side King¹ distinguishes between three different institutional modes for providing skills.

1. Degrees of exposure to technical and vocational skills mediated by levels of the formal school system under Ministries of Education.

1. King, K. Review of Current Experience in Formal and Nonformal Technical and Vocational Education and Training, Mimeo Ottawa 1983.

King, K. New Approaches to the Analysis of Scientific, Technological and Skilled Manpower, Mimeo March 1983.

2. Institutions offering short and long-term skills training, organised by the Ministries of Labour and Industry and by Employers' Organisations.

3. Centres offering short and long-term skills training in rural areas organised by a wide variety of non-governmental bodies as well as in ministries concerned with rural development.

In the area of rural employment - self, subsistence and waged - urban planners and foreign aid donors need to move beyond glib phrases like self-employment and education for self employment and become very specific.

"about what are the styles of work being planned for, and what are the existing patterns of learning utilised in such work. Most important of all perhaps may be the realisation that the world of the self-employed is intimately and inescapably entwined with the more privileged world of employment . And therefore to plan for the one in isolation from the other is to fly directly in the face of reality." (King 1980, p.277)

The cataloguing of existing patterns of learning and of indigenous technical knowledge will need to draw on the skills of the sociologist, the social psychologist, the anthropologist but especially the skills of local people.

Gill (1977) has gone some way towards the determination of learning needs in rural areas by providing a check list of data needs disaggregated by different levels. These are presented below in Figure 5.

Rapid Rural Appraisal.

Rapid Rural Appraisal (Chambers 1983) is better known to those working in the field of Rural Development than to those working in Education and Employment (and even Learning and Working).

Figure 5. Levels and Type of Data Required for Determining Learning needs in rural areas (after Gill 1977)

1. Material level goals and aspirations
2. Regional level
 - economic base —
 - soil type
 - availability of water
 - rainfall patterns
 - other non-renewable resources
 - yields; potentialities and problems of crops, animals
 - roads
 - processing
 - trade
 - storage
 - human resource base —
 - demographic characteristics
 - space settlement patterns
 - land tenure systems
 - size of enterprise
 - production systems
 - input-output relations
 - income levels
 - availability of credit and other inputs
 - living standards
 - political structures
 - existence of formal and informal organisations
 - government/private services
 - education levels
 - education resources and facilities
 - distribution of educational opportunity between different youth groups
 - means of mass communication
3. Community level
 - local occupational and social role structure
 - leadership patterns
 - distribution of social power
 - education and socioeconomic status
4. Individual level
 - interests
 - needs
 - problems
 - occupational aspirations
 - anticipated social roles
 - knowledge
 - skills
 - attitudes

- basic communication skills
 - appreciation of science
 - special and local application of science and technology
 - economics
 - business management
 - citizenship education
 - aesthetic experience and cultural development
 - skills of independent and inter-personal learning

Rapid Rural Appraisal (RRA) is a family of techniques which enables the outsider access to the problems of rural development and the realities of rural deprivation. RRA techniques recognise the trade-offs between the costs of information gathering and its quantity, accuracy, relevance, timeliness and actual use. Many writers have noted that a recurrent problem in vocational education/training in rural areas is that the courses offered are out of line with local needs (Indonesia 1974, Corvalan 1977, Gorham 1982 and Thimmaiah 1982). The problem is not the vocational school fallacy one of courses being chosen and steered in line with the academic step ladder, but rather that courses are often chosen by people who do not know what the local economy looks like, either for lack of time to find out, curiosity, knowledge or all three. The techniques of RRA could be helpful here. They include using/ seeking out existing information; identifying and learning from key informants; direct observation and asking questions about what is seen; guided interviews, group interviews with informal or selected groups. The techniques encourage the planner, the educator, the ministry official, to become a field researcher rather than desk worker. Ideally officials from different ministries should work together in small groups, draw up interview check lists before meetings and visits, use field notebooks to jot down key information during and immediately after interviews, look and listen carefully, seek out different points of view, seek out key informants, conduct group interviews in a non-threatening way and seek out all available secondary information from one's own and other ministries. The techniques, all of them familiar to social scientists who deal with qualitative data, encourage a reversal of learning. The

policy maker and planner learn from the villager. The villager becomes the subject not object of development.

The Use of Existing Information.

The use of existing secondary information referred to above deserves special mention. There often seems to be an assumption that if you want to know something you have to carry out a special survey. What is the education level of adults aged 15-24 living in sub district x? And what kinds of economic activity are they engaged in? Let us do a survey - when perhaps only two years ago the ten year census was conducted and this information was collected. For planning purposes the two year time lag is unlikely to make much difference. The only problem lies in gaining access to the figures through the Statistics Division of the Ministry of Planning. A special tabulation may need to be computed and this may cost money, but it is very unlikely to cost more than starting afresh with a new survey - and waiting a few years for the new results. (Wainerman 1980)

A great deal of useful information for planning purposes can be gleaned from existing sources - if people know where to look and if the obstacles to looking are not too great. Government records on recruitment, selection and promotion, newspaper cuttings of job advertisements, personnel files from parastatal and private organisations, employment exchange data - Examination Board records of school examination performance all currently exist and all provide valuable information for education/employment planning (for example see Smock in Hallak and Caillods 1980, Brooke, Oxenham and Little, 1978, Derniyagala, Dore and Little 1978, Somerset 1982. This point is also stressed by Hollister in Psacharopoulos et al 1983. Solid manpower

analysis and planning can only be done as a regularised continuing process. Some topics may require a special one-off survey but it is important not to let these dominate the analysis and planning activity. Labour Force Surveys, Monthly Industrial Statistics, Census/Surveys of Manufacturing, Quarterly Surveys of Employment, Establishment Surveys on Wages and Earnings, Household Surveys - all can provide valuable information. The challenge is to improve these data and to facilitate their use by complementary agencies/ministries.

Educational Planning.

The counterpart of Employment and Manpower Planning is Educational Planning. A recent reappraisal of educational planning has been published by OECD (1983). That review of educational planning in OECD countries over the past two decades notes that educational development has taken place against two very different backgrounds. The first half of the period was characterised by steady and unprecedented educational expansion, accompanied by rapid economic growth and full employment. The second has been marked by a grave economic crisis resulting in depressed labour markets which affect the demand for post compulsory education. Declining public budgets also affected the supply of education, quantitatively and qualitatively. Declining birth rates have led to a diminution of enrolments at compulsory school levels and have led to teacher surpluses. In the light of the most recent developments, shifts in concept, method and research emphasis are explored.

While this reappraisal is most welcome for the OECD countries, we should be cautious in extending too rapidly the lessons of

this review for developing countries. In the past techniques developed in the North have been transferred to the Third World contexts unquestioningly. The state of current education development in the Third World differs markedly in certain respects from that in OECD countries. It is not clear that public budgets for Education in the Third World are declining at the rate observed in the First World (Lewin, Little and Colclough 1982). Birth rates are not declining, millions of school age children are still out of school, and many countries still experience major teacher shortages. Third World countries should be cautious about changes in technique which are unrelated to local circumstance.

CONCLUSIONS

In this review we have identified a number of conceptual shifts and developments of method in the literature on education and employment - or as we should now regard it - on learning and work. Of course, description is not prescription. A change in concept or method is not always a change for the better. This review is intended to help the reader to keep up with the literature. It is not intended that policy makers relearn the language unselectively. Some new concepts will be helpful, others not. Some new methods will be helpful, others not. Most importantly new methods must reflect new concepts, not determine them. Beware of slavery to method.

We noted earlier two recent developments having implications for the relation between learning and working - global unemployment and information technology. These two developments are not yet well integrated with the literature. Their impact will continue, dramatically and rapidly, over the next decade. Let's hope the literature can keep up.

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Angela Little.

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Cette série se divise en deux catégories de documents : (1) ceux qui ont trait au système éducatif, ou à un aspect particulier de l'éducation dans un pays donné (numérotés C.1, C.2, etc.) et (2) ceux qui traitent d'un sujet dans un contexte géographique plus large ou non défini (numérotés S.1, S.2, etc.). La liste actualisée des titres, qui contient un index par pays et par sujets, peut être obtenue à l'adresse ci-dessous. Tout commentaire éventuel sur cette série et sur chacun des documents serait apprécié.

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