

EDUCATION, EMPLOYMENT AND ECONOMIC PERFORMANCE-PART I

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This is the first of a two-part paper comprising a revised version of a public lecture given at The College of The Bahamas, April 15, 1997. The purpose of the paper is to offer some thoughts about how education, employment and economic performance are related. Does investment generate economic growth? Can education solve the problems of labour? Is education an investment? Does education give access to employment?

In this presentation the author reviews these central issues which have dominated the thinking about education, employment and economic performance during the past 50 years.

Part II of the paper which discusses the process of production will appear in the next edition of College Forum.

INTRODUCTION

This paper offers some thoughts about how education, employment and economic performance are related. The interconnections among them have deep economic, political and social implications, and we need to understand them much better.

This issue is relevant to most countries, including The Bahamas. Different countries often have similar problems, especially since they have become more strongly linked internationally. We know very well that the policies and programmes of one country cannot be transposed to others with different systems and cultures; but if we take the trouble to identify the fundamental nature of a common problem it becomes possible to find a guiding principle which can be applied in more than one country.

A brief review of a few central issues that have dominated thinking about education, employment and economic performance during the past 50 years reveals a preoccupation with the management of public programmes for employment, education and training which failed for lack of understanding of the functioning of the labour market and of how workers learn how to do their jobs.

The process of production entails problem-solving during work. The ensuing learning by doing is the mechanism which links education, employment and production, and gives rise to economic progress. The challenge to educate and labour market policies is to harness the ability of human beings to think, to recognise and resolve problems, and not to instruct workers in specific ways of doing things which will inhibit progress. The implication for management is to mobilise workers' intrinsic interest rather than to impose extrinsic inducements on them.

The Past 50 Years

Economic Growth

One of the more stimulating thinkers of our time, Jerome Bruner, once wrote that each generation has to re-invent education (Bruner, 1966).

After World War II education was reinvented in the context of economic growth which was rapid in the main industrial countries, both victors and vanquished. The speed of growth was a new phenomenon in human memory, and a contrast with the chronic depression of the 1920s and '30s. It generated revenues for expanding social programmes, including education, and high levels of employment.

It was an era of great confidence that growth would continue, and that it could be planned and managed by governments. We had ambitious plans for a safer world and for improved social well-being.

This confidence was at first based on a belief that fixed investment was the key to growth. Investment in buildings and plant was an obvious need in countries whose productive systems had either been destroyed or converted to making weapons of war. The success of investment-based growth seemed to confirm the theory derived from Keynes' work that investment creates growth, and growth generates more investment.

The growth of the first twenty years left the experience of a rising standard of living. But, since the early 1970s economic growth has been slow and interspersed with periods of recession. It was due to the conjunction of some long term trends and unexpected events which included inflation, the oil price shocks in 1973 and 1978, international trade liberalisation, shifts in the location of industries among countries, the emergence of competitive economies in East Asia, advanced technology, and increased labour forces with greater participation of women. These developments were the counterparts of cultural, social and political upheavals. Together, they dislocated production and employment throughout the world, and caused uncertainty about the future. Belief in investment faded, and attention turned more to problems of labour and education.

Education and Employment

The expanded education systems invented after World War II were intended to be instruments of social policy. The aims of assuring democracy and equal opportunity proved to be more elusive than we had thought because they had to be achieved while meeting new pressures to use the additional years of schooling for vocational education. When economic growth was rapid, increase in production obviously required more labour, and scarcities of labour held up production. When growth became slower new kinds of demands were put on education to help solve labour market problems.

Employers argued vigorously that it was the task of education to ensure the supply of labour for growth and to resolve problems in the labour market. Many people thought that vocational education was the best solution for the lower achievers to be prepared for manual or low-grade jobs which they assumed did not require thoughtful intervention.

At first, the focus on vocational education led to attempts to plan and manage the articulation of education and training systems with labour market systems in great detail. Much effort went into creating employment services to help job seekers find employment and any retraining they might need. They were supported by occupational employment and retraining programmes operated by both the labour market authorities and the education authorities. These services depended on three technical interventions: detailed information about the labour market; forecasts of employment by occupation and levels of education; and surveys of vacancies. These interventions were costly, creating large bureaucracies, and were much less effective than had been hoped in estimating and regulating the demand for and the supply of labour. Intervention came to be challenged, for example, in Sweden where it was argued that it was more efficient, and politically less risky, to let the labour market make its own adjustments by changes in wages, and by the mobility of workers among jobs, occupations and employers.

The phenomenon of labour mobility was strong and extensive. It proved to be central to the functioning of the labour market in adjusting the demand for and the supply of labour. Early attempts to investigate it assumed that there was some specific subject-matter knowledge which was common among apparently different jobs, and these common characteristics made mobility possible among occupations. Surgeons and butchers alike need to understand anatomy, but although a surgeon might make a competent butcher, most people would be a little circumspect about submitting to surgery by a butcher. Looking for common skills gave some absurd results until more careful observation indicated better explanations of why some workers are able to transfer among jobs.

It is personal behavioral qualities which permit workers to be mobile in employment. The ability for a person to perform a job depends at least as much on a set of personal attributes such as diligence, imagination, and the abilities to think and to collaborate with others as it does on technical knowledge. Personal attributes will be undervalued as long as the view persists that education should, and can, prepare people for employment by giving them specific job-related subject matter knowledge.

Educational Planning

During this time economists were seeking a more robust explanation of the relation between education and growth. Growth appeared to be faster than could be explained by increases in fixed investment and labour. It was concluded that there was another reason, a "residual factor" which was assumed by Edward Denison to be due to education ((OECD, 1964). Attempts to calculate an association between statistics of spending

on education and of the rate of economic growth have failed, however, to explain the mechanism by which education generates growth. The inverse relation, that economic growth provides more resources to expand the education system is more easily understood.

The idea that education facilitates growth was translated by Gary Becker in calculations of the individual rates of return to the investment of time and money in education (Becker, 1964). These calculations were made easier by the advent of the "first generation" computers in the 1960s, and became the fashion in thousands of Ph.D. theses in the 1960s and '70s.

The higher rates of return for longer periods of education appeared to justify the expansion of higher education, although they were not used by education authorities to allocate education among occupations. Nor is it likely that private individuals ever made the calculations, but they respond strongly to the idea of education as an investment by seeking higher education.

Although the technical methods are questionable, the central flow is the concept of education as an investment. It is a metaphor, not literally true. In civilised countries workers are no longer bought and sold. They are not capital equipment which deteriorates and has to be amortised: in fact workers are often improved by experience. Education now does yield future benefits. But education is not entirely deferred gratification. It can be enjoyed as well, so the idea of education as an investment is not very rigorous economics. We need better explanation of how educated people contribute to growth.

Nevertheless, the idea governs the growing world-wide demand for higher education, even to the point of inducing persons to seek it who lack the intrinsic interest or ability. Their expectations explain the persistence of credentialism. Persons compete for jobs on the basis of formal credentials, and seek better ones to enhance their job and lifetime opportunities; and employers use credentials as a cheaper way of selecting workers than interviewing everyone.

It should be noted that the use of any other criterion in selection for employment, whether it be gender, race, religion or age, is either illegal or socially unacceptable discrimination. The use of educational credentials is the only one which is widely accepted as legitimate. What is often overlooked, however, is that obtaining a better credential can give any one person an advantage in the labour market, but not everyone.

The process of social selection is also driven by several arrangements that we do not question. The criteria for entry to colleges and universities based on formal tests of literacy and numeracy send messages back through society. The tacit assumption that manual work and vocational education are more appropriate for the lower achievers is rarely questioned. Programmes in college and universities are much longer and more thorough than most industrial and vocational training programmes.

The consequence has to some extent been a debasement of the value of education. But we can observe something positive, too. The widespread use of credentials is made possible by rising educational levels in the population of working age. Young people with more formal schooling are coming into the labour market, and older people who had little formal schooling when they were young are retiring. The result is that after about 1960 the proportion of people in the population with four or more years of college began to rise rapidly. In several countries it has gone from less than 5% to over 25%. Although there has been some lowering of education standards, the overall effect has been for graduates to be employed in occupations which formerly hired people with high school graduation or less; for example, secretaries and sales representatives. The result has been to raise the levels of expertise to transform the content of their jobs and how they are done. "Overtraining" is not necessarily a bad thing.

These attitudes and practices which dominate the relation between general and vocational education reflect and perpetuate the beliefs on which social structure is built. The fashion of "Taylorism", introduced in 1911, aimed to design work to eliminate the slightest degree of thinking by a manual worker (Taylor, 1911). In 1980 an OECD report recommended a policy of greater convergence between general and vocational education (OECD, 1980). The limited response is disturbing, because it indicates a failure to recognise what general and vocational education have in common.

Education and Unemployment

Full employment has usually been associated with some inevitable minimum amount of unemployment due to people changing jobs or to industrial reorganisation but, as long as growth was rapid, national economic activity was high enough to support the payment benefits. In the 1960s demand management policies to reduce inflation had the effect of increasing unemployment; but these policies were still possible as long as the level of unemployment remained at about 2^{1/2} to 3%. At that level of economic activity, unemployment benefit schemes and retraining programmes were still financially viable; and there were enough jobs for most of the retrained workers despite some increase in the duration of unemployment.

In the 1970s and '80s unemployment grew to levels we had thought were no longer possible and, because of growing segmentation in the labour market, it fell more heavily on some people than others. Policies for coping with unemployment still tried to put the emphasis on the supply of labour, mainly by training selected groups of unemployed workers. It was argued that the cost to the economy of training an unemployed person was less than that of training someone employed, because it entailed no loss of production. But before long these policies ran into problems.

Graduates from all parts of the education system found it increasingly difficult to get jobs, especially in the field in which they have been trained. Governments tried many expedients. Programmes to combine training and subsidised job creation programmes

were a temporary and artificial way of stimulating the demand for labour. Moreover, they encouraged employers to substitute temporary workers for permanent ones, and jobs with low pay and poor conditions for regular jobs with standard benefits. Measures were tried, such as reducing the labour force by early retirement or paying foreign workers to go home.

During the 1980s there was growing concern about the lack of jobs for school leavers entering the labour market. Their situation was sufficiently grave to be described as social "marginalisation" or even "rejection". The special programmes to give school leavers temporary employment were so brief, often as little as three months, and so small in scale compared with the numbers seeking work, that they became known as "revolving doors" which left most participants no better off than before they entered. This problem of access to employment is an issue of entry into adult social life, and remains persistent and serious.

Efforts to find additional finance, such as by diverting money from unemployment compensation funds, proved administratively or constitutionally difficult.

Retraining programmes came to be seen as a costly alternative to better initial education, especially when it was found that a large proportion of training costs were devoted to remedial education. The reduction in unemployment was more apparent than real for two reasons. Trainees are excluded from the labour force and from unemployment as they are measured; and training programmes had only a cosmetic effect as long as they remained of short duration. Training needed to be longer and more thorough, and better related to the production process.

The weakness of these various types of measures was that policies to act on the supply of labour could not by themselves solve the lack of demand from employers. So training came to be questioned politically for raising expectations that it could help people find jobs, and good ones, but failing to meet them.

This history demonstrates an extraordinarily strong belief in training programmes for the wrong reasons. It was a convenient alternative to general economic policy and better fiscal and financial management. But it went further, becoming a belief that training creates employment. The argument was often heard that, because Australia, Germany and Switzerland had apprenticeship systems, that must be reasons why employment was high in those countries. Consequently, politicians and policy-makers converged on Germany to see what they could adopt. It was not realised that, because the German training system is employment-based, it was high employment which permitted high levels of sustained, good quality training. The truth of this has unfortunately been demonstrated now that unemployment in Germany is over 11%. Economic policy measures, whether based on investment, or a cheap exchange rate policy, or promoting high quality production and after sales services, can generate indirectly a sustained demand for trained workers. Direct spending on training alone cannot.

CONCLUSION

During the past 50 years confidence in planning declined, as countries became pre-occupied with ad hoc problems. There was a political shift from trying to plan specific results, to trying to influence processes, for example by deregulation.

It was an economic and a political mistake to use education and training in the expectation of solving economic problems which were the responsibility of other areas of policy. Attempts to link education, the labour market and the economy through the design and management of programmes, were misdirected in failing to identify the process that does connect them.

To better understand this process it is necessary to go more deeply into the learning at the level of the individual person. Some clues can be found in what might seem an unexpected quarter: the economy itself.

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