

MODULE 1

Development thinking and the implications for educational financing

This module consists of four sections which attempt to examine development thinking from the 1950s to the present day.

Section 1 deals with human capital theory and modernisation theory in the 1950s and 1960s.

Section 2 deals with the era of structural adjustment of the 1970s and 1980s.

Section 3 deals with the evolution of the human development paradigm in the 1990s.

Section 4 deals with globalisation and the new informational economy.

Each section gives some stimulus materials to be read, some questions for discussion, background information and summary points to facilitate understanding. At the end of the four sections there is a list of suggested further reading.

SECTION 1

At the end of this section participants should be able to:

1. Explain the fundamentals of 'human capital theory' and 'modernisation theory';
2. Use 'dependency theory' to critique 'human capital theory' and 'modernisation theory';
3. Relate patterns of educational financing in the 1950s and 1960s to 'human capital theory'.

Background

In the late 1950s and 1960s colonial empires were being dismantled and many countries across the Caribbean, Africa and other parts of the globe received constitutional independence. It was a time when Keynesian economics, aided by socialist ideology and the rise of the welfare state, created an outlook that fostered a drive to rapid growth and development. Newly elected governments were also keen to demonstrate the benefits of independence to their electorates. A theoretical justification was also offered.

Instruction 1

Read Box 1. This excerpt is taken from the Draft Plan for Education in Trinidad and Tobago, 1968–83, which was drawn up with advice from UNESCO.

Box 1

It is not necessary to argue the relevance of education to economic development but it would be necessary to indicate that we have passed the point of argument. Dr Adiscshiah, Deputy Director General of UNESCO and an economist, speaking in India in December 1966 said:

But the function of education in national development in the considered view of a growing number of economists, and I happen to be one of them, does not end with the contribution it makes to a nation's labour skills. Its role is even more crucial and decisive. There is indeed a striking concordance between the amount of national income which a country invests in its educational system, and the rate at which that national income grows. In countries as far apart and diverse as Sweden and Japan, Germany and Mexico, the USSR and Israel, Czechoslovakia and Ghana, there seems to be more than an accidental or coincidental force at work linking high rates of educational investment and high rates of national income growth. Equally, a low rate of educational investment, such as is prevalent in India, Brazil, Greece, Ethiopia, Syria and Pakistan, for example, seems to be accompanied by a low rate of national income growth. Thus, there is a strong historical presumption that the key to growth is the rate at which the educational investment of a country progresses or regresses.

Trinidad and Tobago must continue to make the investment needed in education or face the difficulties consequent upon failure. The Plan seeks to ensure that what is invested is efficiently spent. (Draft Education Plan for Trinidad & Tobago, 1968–1983, p. 6)

Activity 1

1. What is the connection being made between investment in education and economic growth?
2. Is it right to assume that the relationship between educational expenditure and economic growth operates in the same way in both developed and developing countries?
3. In the 1960s and today, has it sometimes been assumed that in order to develop, poorer countries simply have to follow the strategies of the developed countries?

Remember that the developing countries of the world sometimes have production structures that are externally dependent and they may depend on single commodities with unstable prices.

Instruction 2

Study the Table in Box 2.

Box 2

Table 1.1. Educational Enrolments in Less-Developed Countries Combined: 1950, 1960 and 1966

Educational enrolments	Increase 1950–1960				Increase 1950–1960		
	1950 1000s	1960 1000s	Total increase %	Average annual rate of increase %	1966 1000s	Total increase %	Average annual rate of increase %
<i>Total, all less-developed countries</i>							
1. All three levels	79,444	146,567	84.5	6.3	218,381	49.0	6.9
2. First level	70,262	125,502	78.6	6.0	180,040	43.5	6.2
3. Second level	8,108	18,638	129.9	8.7	33,774	81.2	10.4
4. Third level	1,074	2,427	126.0	8.5	4,567	88.17	11.1

Source: UNESCO Statistical Yearbook, 1968

Activity 2

1. What rate and pattern of educational expansion is evident in the 1960s?
2. Does this reflect the experience of your country?

Consider the need for more high level skills if these economies have to be transformed.

Instruction 3

Read Box 3.

Box 3

The **national economies in the countries of "early growth"** succeeded in part because they were consolidated at the same time as the world market expanded, so that these countries came to occupy the leading positions in the system of international domination. From this scheme it is evident that "early development," although a very broad and imprecise term, is significantly different from what has occurred in Latin America.

It has been assumed that the peripheral countries would have to repeat the evolution of the economies of the central countries in order to achieve development. But it is clear that from its beginning the capitalist process implied an unequal relation between the central and the peripheral economies. Many "underdeveloped" economies – for example, those of Latin America – were incorporated into the capitalist system as colonies and later as national states, and they have stayed in the capitalist system throughout their history. They remain, however, peripheral economies with particular historical paths when compared with central capitalist economies.

Cardosa and Faletto *Dependency and Development in Latin America* (University of California Press, 1979) p. 23

Activity 3

1. *What is meant by central and peripheral economies?*
2. *How do peripheral economies differ from central economies?*
3. *Does your country display characteristics of a peripheral economy?*

Summary

Key points to consider:

1. Modernisation theory refers to a school of thought permeating economics, sociology, and social psychology which promoted the idea that developing countries simply have to copy the strategies of the developed. The newly developing countries simply had to follow the path of development which the more developed had followed. The richer countries were assumed to have 'arrived'.
2. Human Capital theory is part of the family of modernisation theory. In the 1960s, an economist by the name of Theodore Schultz produced research which showed strong positive correlation between educational expenditure and economic development. He argued that education does not only improve the individual choices open to individuals, but that an educated population provides the type of labour force necessary for industrial development and economic growth. Many developing countries have come to understand that the benefits of educational expansion can be very elusive. Firstly, the actual content and delivery of educational programmes have to be appropriate to culture, context and history. This is not easily achieved. Also education does not by itself remove structural features of underdevelopment.
3. The quotation by Cardoso and Faletto in Box 3 is representative of the Dependency School which argues for an understanding of the unique characteristics of developing countries as a prerequisite for any development strategy. Dependency theorists emphasised that the richer countries were undeveloped at one time but they were never 'under' developed. The colonial experience of a lot of poor countries left legacies of economic structure – foreign tastes, monocrop, dependence on imports, export dependence, dependence on foreign capital, enterprise and technology – all of which prove very difficult to dismantle.

SECTION 2

At the end of this section participants should be able to:

1. Explain the meaning of structural adjustment;
2. Identify the philosophy behind structural adjustment policies;
3. Identify the effects of structural adjustment policies on educational financing in Caribbean countries.

Background

In the 1970s, due to the oil price shocks, a large number of developing countries experienced crisis in their economies. The IMF (International Monetary Fund) and World Bank lent countries money under strict conditionalities. These conditionalities enforced a type of adjustment and a speed of adjustment which experience has shown as ill-conceived, if not highly unfair. The effect on educational financing during this period has been highly destructive.

Instruction 4

Read Boxes 4 and 5.

Box 4

The main argument of the typical IMF/World Bank structural adjustment package rests on the belief that if governments reduce their intervention in the economy, and decisions are left to market forces, all things will eventually fall into place and there will be no internal or external disequilibria. The movement of resources to their best uses will optimise social welfare. A conviction that the market is the best guide to decision making and all human beings have the same materialist values and react the same way in all societies are common assumptions in all structural adjustment programmes, regardless of where they are being implemented.

From an article by Ramesh Ramsaran in *Structural Adjustment Education*, ed. John La Guerre, 1994, p.20

Box 5

A structural adjustment programme is a type of policy reform which is espoused by multilateral international organisations, such as the International Monetary Fund, the World Bank, its affiliates and the donor community. Structural adjustment may be defined as a complex set of multilevel organisational and interorganisational interventions with multiple goals and objectives, a wide range of public and private sector organisations and organisational actors, with many intended and unintended consequences.

From articles by Khan Jamal, *Structural Adjustment Education*, ed. John La Guerre, p. 88

Activity 4

1. What kind of economic ideologies are at the root of the IMF and World Bank policies?
2. Give examples of the wide ranging effect of these policies for any country with which you are familiar.

Instruction 5

Read Box 6.

Box 6

A major part of adjustment programmes involves the mounting of wide-ranging reforms aimed at bringing about improvements in the performance and task orientation of public organisations. Well-known reform strategies include streamlining and improving public sector management, partial or complete divestment, liquidation or closure of public enterprises, decentralisation, and strengthening of the private sector.

Jamal Khan, p. 89, *op. cit.*

Activity 5

1. *What kind of managerial ideologies were part and parcel of the IMF and World Bank?*
2. *Give examples within your country of advances towards accountability, efficiency, divestment, privatisation.*
3. *Are these managerial approaches desirable?*

IMF conditionalities always attempted to level the playing field both nationally and internationally. All restrictions on foreign trade were removed. All government market interventions internally were resisted. Competition, accountability and self support were the yardsticks by which all organisations had to live. The mix of policies used across the globe by the World Bank and the IMF included:

- currency devaluation
- reduced public expenditures
- reduced subsidies, especially to consumers
- reduction or elimination of price controls
- revised trade policies intended to encourage exports
- revised fiscal, especially tax, policies intended to increase government revenue
- new or increased user charges for public services
- privatisation of both enterprises and social services
- institutional reforms required to implement these policies

Instruction 6

Read Boxes 7 and 8.

Box 7

The marked decline in the quality of education, and the grave implications for human resource development began to emerge in the late 1970s and accelerated in the 1980s. The nexus of high student attrition, absenteeism and grade repetition have resulted in low overall completion rates. The trend since 1982 reveals that a large percentage

of students who finish Grade 6, possibly as many as 50 per cent, may be considered functionally illiterate, insofar as they read simple texts with extreme difficulty. A particularly disturbing aspect of student attrition revealed by the Survey of Living Conditions is the fact that 10 more boys than girls dropped out of school by the time they had reached 19 years of age. It was found that two thirds of the drop outs at primary level are boys, and half of the males who leave school do so in the first half of secondary school, while only 45 per cent of females leave so early. This phenomenon was described as 'highly unusual compared to most other countries in the world.'

Kari Polanyi Levitt, *The Origins and Consequences of Jamaica's Debt Crisis*, 1991, p. 53. Consortium Graduate School of Social Sciences

Box 8

Even if the required government reduction in public spending on education, as well as on other public goods, was ultimately not successful, we argue that the adjustment process itself produced a negative effect on the shape and quality of Costa Rica's public education, at least at the secondary level. The attempt to hold down salaries and teachers' reaction had important negative implications for education expansion at the secondary level and special consequences for the distribution of education in the Costa Rican population. Access to higher levels of schooling for lower socio-economic class children became more restricted and different than in the past, and the general tenor of Costa Rica's human resource development changed. The policies also evoked a highly negative response in the form of lower teacher and parent morale. Therefore, the end result of the decisions made by successive governments was that costs of education were only somewhat contained but that secondary school enrolment and quality, closely associated with the democratisation of Costa Rican education, also never recovered from the impact of the crisis a decade earlier.

Martin Carnoy and Carlos A Torres in *Coping with Crisis, Austerity Adjustment and Human Resources*, ed. Joel Samoff. Cassell, 1994, p. 65 (UNESCO)

Activity 6

1. What was the effect on education of the IMF and World Bank policies in Jamaica and Costa Rica?
2. How was educational financing in your country affected during this period?

Summary

In general, post 1970 IMF and World Bank policies were frequently ill-conceived and when imposed led to cuts in educational expenditure.

Tilak (1997) makes some observations.¹

1. Firstly, *the quality of education gets traded off for quantitative expansions* i.e. cuts made in staffing and materials while provision might increase.
2. *Equity is traded off for quantity.* School places might increase but less specific provisions for the poor.
3. *Mainly middle and upper-income groups benefit*, even at the expense of the sector relating to mass education. Investment priorities generally shift from primary education, adult education and other mass education programmes to higher education. The elites benefit from such a shift.

¹Tilak, JBG, 'The effects of adjustment on education: A review of the Asian experience', *Prospects*, Vol. XXVII, No.1, March 1997, pp. 85–107.

SECTION 3

At the end of this section participants should be able to:

1. Trace the evolution of the Human Development Paradigm;
2. Explain the main pillars of this new paradigm;
3. Assess the implications for educational financing of the Human Development Paradigm.

Background

During the 1990s the commitment to human development has been made specific – and linked to time bound targets – in the declaration and plans of action adopted in major global conferences on:

Children	1990
Education for all	1990
Environment and sustainable development	1992
Human rights	1993
Population and development	1994
Social development	1995
Human settlements	1996
Food security	1996

In addition, 1987–1997 was declared the Decade for the Development of Culture by the United Nations and the decade 1997–2007 has been declared the Decade for the Eradication of Poverty. The United Nations Development Programme has begun to publish an annual Human Development Report which ranks countries of the world according to a human development index. This index factors in items such as health, education, transport, housing and political freedoms to complement the traditional economic indicators.

Activity 7

1. *From this brief list given immediately above, what concerns seem dominant in the 1990s and beyond?*
2. *How do these concerns compare with the 1960s and late 1970s and 1980s?*

Instruction 7

Read Box 9.

Box 9

According to one view, development is a process of economic growth, a rapid and sustained expansion of production, productivity and income per head (sometimes qualified by insistence on a wide spread of the benefits of this growth). According to the other, espoused by UNDP's annual Human Development Report and by many distinguished economists, development is seen as a process that enhances the effective freedom of the people involved to pursue whatever they have reason to value. This view of human development (in contrast to narrowly economic development) is a culturally conditioned view of economic and social progress. Poverty, in this view, implies not only lack of essential goods and services, but also lack of opportunities to choose a fuller, more satisfying, more valuable and valued existence. The choice can also be for a different style of development, a different path, based on different values from those of the highest income countries. The recent spread of democratic institutions, of market choices, of participatory management of firms, has enabled individuals and groups of different cultures to choose for themselves.

Our Creative Diversity, UNESCO 1995. Report of the World Commission on Culture and Development, p. 22

Activity 8

1. *How does the view of development advocated by the Human Development Report differ from that of earlier economists?*

Instruction 8

Read Box 10

Box 10

On some aspects of the Human Development Paradigm, there is fairly broad agreement.

- Development must position people at the centre of its concerns.
- The purpose of development is to augment all human choices, not just income.
- The Human Development Paradigm is concerned both with building up human capabilities fully (through an enabling framework for growth and employment).
- Human development has four essential pillars: equity, sustainability, productivity and empowerment. It regards economic growth as essential but emphasises the need to pay attention to its quality and distribution, analyses at length its link with human lives and questions its long-term sustainability.
- The Human Development Paradigm defines the ends of development and analyses sensible options for achieving them.

Mabbub-ul Haq, *Reflections on Human Development*. Oxford University Press, 1995, p. 21

Activity 9

Explain the four pillars of the Human Development Paradigm.

Instruction 9

Read Box 11.

Points to consider:

With gender, environment, poverty reduction and culture squarely on the agenda, education must aim at inclusion of all groups and include learning from cradle to grave as well as encourage participation from all stakeholders. This will definitely have implications for the quality and spread of educational financing.

Box 11

PRINCIPAL ELEMENTS OF THE FRAMEWORK FOR ACTION

Goals and Targets

Countries may wish to set their own targets for the 1990s in terms of the following proposed dimensions:

1. Expansion of early childhood care and developmental activities – including family and community intervention – especially for poor, disadvantaged and disabled children.
2. Universal access to, and completion of, primary education (or whatever higher level of education is considered “basic”) by the year 2000.
3. Improvement in learning achievement such that a given percentage of an appropriate age cohort (for instance, 80 per cent of 14-year olds) attains or surpasses a defined level of necessary learning achievement.
4. Reduction in the adult illiteracy rate (the appropriate age group to be determined in each country) to, for instance, one-half its 1990 level by the year 2000, with sufficient emphasis on female literacy to significantly reduce the current disparity between male and female illiteracy rates.
5. Expansion of basic education and training in other essential skills required by youths and adults, with programme effectiveness assessed in terms of behavioural changes and impact on health, employment, and productivity.
6. Increased acquisition by individuals and families of the knowledge, skills and values required for better living and sound, sustainable development through all educational channels (including mass media and other forms of modern and traditional communication) and social action, with effectiveness assessed in terms of behavioural change.

Errol Miller, *Education for All: Caribbean Perspectives and Imperatives*. IADB, Washington DC, 1992, p.11

Activity 10

1. *These goals came out of the Conference on Education for All in 1990 in Thailand. How do these goals conform to the four pillars of the Human Development Paradigm?*
2. *How would an emphasis on human development affect the pattern of school financing in your country?*

SECTION 4

At the end of this section participants should be able to:

1. Describe the concept of globalisation and demonstrate the effects of globalisation on developing countries;
2. Explain the impact of information technology on production, trade and commerce;
3. Assess the implications for educational financing of globalisation and the new informational economy.

Background

Over the last two decades, under the influence of the IMF and World Bank, free market economic policies have been the dominant paradigm. The removal of trade barriers across national boundaries has been a top priority of the IMF and World Bank. This has meant that local producers in any environment must be equipped to face foreign competition and to compete in foreign markets.

This trend to globalisation has been intensified by some other changes in technology which have impacted powerfully on production and trade.

Manuel Castello (1993) describes the emerging world economy as an 'informational economy' and defines four key characteristics.

1. The first feature of this economy is that 'sources of productivity and economic growth are increasingly dependent upon the application of science and technology, as well as upon the quality of information and management, in the process of production, consumption, distribution and trade', p. 15.

2. The second feature of the new world economy is the shift from material production to information processing activities.
3. The third feature is the shift from standardised mass production to flexible customised production and from vertically integrated large scale organisations to vertical disintegration and horizontal networks between economic units.
4. Finally, these economic and organisational transformations in the world economy take place simultaneously with the revolution in information technologies (micro electronics, information and telecommunications) around which a constellation of major scientific discoveries and applications (in biotechnology, new materials, lasers, renewable energy, etc.) is transforming the material basis of our world in fewer than twenty years.

Instruction 10

Read Box 12.

Box 12

A transition from an economy protected from competition to an economy that accepts and promotes competition has significant implications. First, firms are obliged to allocate resources more efficiently to increase productivity. Second, domestic firms, when forced to compete internationally, have to develop and mature technologically and managerial. Third, a more competitive economic environment is more sensitive and vulnerable to changes in demand for types and quality of products. As a consequence, it will be more difficult to predict which skills will be needed in the future and for how long. These factors necessitate a more mobile work-force that is flexible in adopting new skills.

Wad D Haddad, 'Globalisation of the economy: the implications for education and skill formation' *Prospects*, Vol. XXVII, No.1, March 1997, p.36

Activity 11

1. *How does the business environment of a country change when protectionist barriers are removed?*
2. *What responses are required from local producers?*
3. *What implications are there for the work-force and consequently for educational financing?*

It is clear today that the human resource is of paramount importance and knowledge is the critical skill. This heightens the role of education.

Instruction 11

Read Boxes 13 and 14.

Box 13

In the past comparative advantage was a function of natural-resources endowments and factor proportions (capital-labour ratios). Cotton was grown in the American South because the climate and soil were right. Slavery provided abundant labour. Cotton was spun in New England because it had the capital to harness available waterpower. Each industry had its natural location.

Consider what are commonly believed to be the seven key industries of the next few decades – microelectronics, biotechnology, the new materials industries, civilian aviation, telecommunications, robots plus machine tools, and computers plus software. All are brainpower industries. Each could be located anywhere on the face of the globe. Where they will be located depends upon who can organise the brainpower to capture them. In the century ahead comparative advantage will be man-made.

Since technology lies behind man-made comparative advantage, research and development becomes critical. In the past the economic winners were those who invented new products. The British in the nineteenth century and the Americans in the twentieth century got rich doing so. But in the twenty-first century sustainable competitive advantage will

come much more out of new process technologies and much less out of new product technologies. Reverse engineering has become an art form. New products can easily be reproduced. What used to be primary (inventing new products) becomes secondary, and what used to be secondary (inventing and perfecting new processes) becomes primary.

Lester Thurrow, *Head to Head*. William Morrow & Co. Inc., NY, p. 45

Box 14

Firms have to be able to use new computer-based CAD-CAM technologies, employ statistical quality control, manage just-in-time inventories, and operate flexible manufacturing systems. Information technologies have to be integrated into the entire production process, from initial designs through marketing to final sales and supporting services such as maintenance. To do this requires the office, the factory, the retail store, and the repair service to have average workers with levels of education and skill that they have never had to have in the past. To employ statistical quality control, every production worker must be taught some simple operations research. To learn what must be learnt, every worker must have a level of basic mathematics that is far beyond what is achieved by most American high school graduates. Without statistical quality control, today's high-density semiconductor chips cannot be built. They can be invented, but they cannot be built.

Lester Thurrow, *op. cit.*

Activity 12

1. Which are the key industries of the future?
2. Why are they called brain-based industries?
3. How is information technology being integrated into production?
4. How can information technology affect management and organisation?

Instruction 12

Read Box 15.

Box 15

First are the modern problem-solving skills required to put things together in unique ways (be they alloys, molecules, semi-conductor chips, software codes, movie scripts, pension portfolios or information) . . .

Next are the skills required to help customers understand their needs and how those needs can best be met by customised products . . . selling and marketing customised products requires having intimate knowledge of a customer's business, where competitive advantage may lie, and how it can be achieved. The key is to identify new problems and possibilities to which the customised product might be applicable. The art of persuasion is replaced by the identification of opportunity. Third are the skills needed to link problem-solvers and problem-identifiers. People in such roles must understand enough about specific technologies and markets to see the potential for new products, raise whatever money is necessary to launch the project, and assemble the right problem-solvers and identifiers to carry it out.

Robert Reich, *The Work of Nations*

Activity 13

1. *Discuss the range of skills required by the work-force.*
2. *What does this suggest for the provision of education both in quality and quantity?*

Summary

The rise of the new informational economy once more makes education a primary concern for economic growth and development. In fact the connection between education and development which prevailed in the 1960s is now stronger than ever. It is now asserted by writers like Robert Reich and Michael Porter that education determines the possibilities for

development in the modern era.

Suggested reading

Section 1

Best, Lloyd and Levitt, Kari (1967). *Externally propelled growth in the Caribbean, Selected Essays*. Centre for Developing Area Studies, McGill University.

Cardoso and Faletto (1979). *Dependency and Development in Latin America*. University of California Press.

Inkeles, Alex and Smith, O (1974). *Becoming modern: individual change in six developing countries*. Cambridge, Mass: Harvard University Press.

Section 2

La Guerre, John (ed.) (1994). *Structural Adjustment Education. Public Policy and Administration in the Caribbean*. School of Continuing Studies, UWI., St. Augustine.

Levitt, Kari (1991). *The Origins and Consequences of Jamaica's Debt Crisis*. Consortium Graduate School of Social Sciences.

Manley, Michael (1987). *Up the Down Escalator*. London: Andre Deutsch.

Samoff, Joel, (ed.). *Coping with Crisis*. Cassell. UNESCO.

Tilak, JBG (1997). 'The effects of adjustment on education: a review of the Asian experience', *Prospects*, Vol. XXXVII No.1, March, pp. 85–107.

Tilak, JBG (1992). 'Education and structural adjustment', *Prospects* 22 (4), No. 8, pp.407–22.

Tilak, JBG (1989). 'The recession and public investment in education in Latin America', *Journal of Inter-American Studies and World Affairs*, 31 (1–2) (Spring–Summer), pp. 125–46.

Section 3

Haq, Mabbab-ul (1995). *Reflection on Human Development*. Oxford: Oxford University Press.

Miller, Errol (1992). *Education for all: Caribbean Perspectives and Imperatives*. IADB Washington. DC.

Tilak, JBG (1992). 'From economic growth to human development: a

commentary on recent Indexes of Development', *International Journal of Social Economics*, 19 (2), pp.31–42.

UNDP: Human Development Reports, 1990–1998.

UNESCO (1995). *Our Creative Diversity*. Report of the World Commission on Culture and Development.

Section 4

Carvog, Castello *et al.* (1993). *The New Global Economy in the Information Age*. University Park: Pennsylvania State University Press.

Reich, Robert (1991). *The Work of Nations*. New York: Basic Books.

Thurrow, Lester (1992). *Head to Head*. New York: William Morrow & Co. Inc.

Some articles in *Prospects* Vol. XXXVII No.1. March 1997 are also relevant to this section.