The English-speaking Caribbean are those states that were formerly British Colonies. The institutionalization of educational research in this area has evolved over the past thirty years. The settings for research institutions have been the university, government ministry of education, and private enterprise. The research findings have been used for legitimization of policy changes; justification of educational expenditures; ensuring quality; and action as a problem solving device. Most of the research has conformed to the traditional mode of thought and has been imitative, rather than inventive. A meeting of researchers in the Caribbean was held in Barbados in 1981. As a result, the group decided on the necessity for linkages to be established between researchers across several disciplines. Biennial conferences of educational researchers rotating among countries was suggested. An agency was needed to oversee the institutionalization of educational research in the region. A proposal was made for universities of the region to discuss regional loans for research with governments. Establishment of a Caribbean Educational Review and Advisory Group was proposed as the most effective means of drawing together educational researchers to give direction, guidance, and inspiration to the development of educational research in the region. (DHW)
EDUCATIONAL RESEARCH IN THE ENGLISH-SPEAKING CARIBBEAN

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Introduction

The English-speaking Caribbean can be defined as those states that were formerly British colonies. They can be classified according to political status as follows: the older independent states of Jamaica, Trinidad and Tobago, Barbados, Guyana and the Bahamas; the newly independent states of Grenada, St. Lucia, Belize, Dominica and Antigua and the associated states of St. Kitts-Nevis, St. Vincent and Montserrat that are still colonies of Britain. Guyana and Belize belong to the continental land mass of Central and South America while the others are all islands. They share a similar history, a common language and a basic core culture. Despite these commonalities there are distinctive differences and peculiar variations which mark each state with uniqueness.

The cultural similarities and geographic proximity of these states have allowed them to operate as a regional group. Regional institutions exist in the areas of trade, education, meteorology, development banking and sports. These regional bonds, however, were not strong enough to sustain political unity. An attempt in the 1950's at a West Indian Federation failed. The dream of a single Caribbean nation composed of thirteen or more states gave way to the present reality of numerous mini and micro-states.

The Institutionalization of Educational Research

The institutionalization of educational research in the English-speaking Caribbean has taken place over the last thirty years. Research institutions have been created in three distinctly different settings. In chronological order of establishment they can be listed as follows:

(a) The University Setting: There are two Universities in the region. These are the University of Guyana and the University of the West Indies.
The latter was the first to be established in 1948 when it began with a Medical Faculty. The Faculties of Arts and Natural Sciences followed shortly. In 1952 the Department of Education was established. This marked the establishment of the first educational institution in the English-speaking Caribbean with a mandate that included educational research as a substantive activity. In 1962 the Institute of Education was established which significantly added to the educational research capability both in terms of personnel and financing. Because the Institute of Education was established regionally it also meant the spread of educational research from Mona in Jamaica to Cave Hill in Barbados and St. Augustine in Trinidad.

In 1964 Guyana seceded from the University of the West Indies and established its own University, the University of Guyana in Turkeyen, Georgetown. With the establishment of the Faculty of Education in 1966 educational research received a further institutional boost.

The University is a community of scholars. Research is part of its tradition. The expectation is that University's intellectuals will not only transmit knowledge but inquire into its nature and depth, extend its boundaries and expand understanding. Accordingly, the University is accorded a status of autonomy that allows it to be somewhat removed from the hurly-burly and hustle of the real world. The Caribbean adopted the classic European and British conceptions of the University. With the University came research including educational research. It was part of the package.

(b) The Ministry Setting: Government Ministries in the Caribbean are the creation of the political march to national sovereignty and political independence. During the colonial era the various colonies were governed by departments headed by directors from the British Civil Service working out of the colonial office. Their source of authority and information did not arise from within the colony but from the intellectual centres of
the mother country. Research was not a part of the colonial framework.

In the process of transformation from colony to sovereign state, departments of Education evolved into Ministries. By a process of accretion the Ministries of Education acquired expanded functions and additional service roles. These functions included:

1. planning;
2. curriculum development;
3. measurement and evaluation;
4. test development;
5. social welfare;
6. psychological services;
7. special education.

In the pursuit of a knowledge base for the execution of these functions and in performing several of these services, educational research was encompassed either as a supporting activity or as a by-product.

In Jamaica and Guyana during periods of rapid developments involving far-reaching structural changes, with education being portrayed as the flagship of the armada of national reconstruction, research units were established to perform the following functions:

1. to assist in decision-making by providing an empirical data base;
2. justify increasing expenditure on education;
3. provide quality control, where this is understood to include both formative and summative evaluation;
4. act as a problem-solving device especially with respect to some of the more intractable problems within the educational systems.

While the institutional base for educational research in Ministries of Government is smaller than that in the Universities it constitutes a very significant part of the research capability of the English-speaking Caribbean.
The Private Enterprise Setting: Over the last five years two educational research institutions have been created as a result of private enterprise. The Mel Nathan Institute in Jamaica is sponsored by the United Church of Jamaica and Grand Cayman while the Caribbean Research Centre in St. Lucia is established as a non-profit, limited liability company. Despite the difference in the format in which they have been established both are the direct result of the personal interest and commitment to research of individuals. Both individuals are trained in research and committed to pursue research but are unable to do so in their existing institutional location. Accordingly, they have created their own institutional framework in which to pursue their research interests. In doing so they have created a significant departure by facilitating educational research outside of the context of either the University or Government. In terms of size and current impact these institutions are quite insignificant. However, they could signal the evolution of a new element in structural arrangements for educational research in the Caribbean. Both institutions have been able to attract funding from their respective governments as well as international agencies. Whether such institutions will survive still remains to be seen.

Political Milieu

With the exception of Grenada recently, all the Caribbean nations have been either two party or multi-party democracies. In the 1940's Britain granted her Caribbean colonies adult suffrage. At first under British tutelage and more recently on their own, these nations have practised the Westminster model of parliamentary democracy. While political parties have varied widely across the ideological spectrum the ballot box has been the means of changing governments. To date, Grenada has been the only exception.
While parties may vary ideologically and governments are changed periodically, by and large there has been continuity in domestic policies by succeeding governments. Usually, the criticism leveled by the party or parties in opposition against the government is that of magnitude, management and method. The government is not doing enough, it is doing it inefficiently and it is not going about it in the right way. The overall goal and objective of making the lot of the common man better is never in question. No party could aspire to public office without such commitment. It is Axiomatic that governments accept to provide more and better housing, more and better education and more and better health care.

Against this political background educational change and development in the English-speaking Caribbean has proceeded on very similar lines in an almost uninterrupted fashion over the last 40 years despite several changes in government in most of the territories. Each successive government has tended to accept the major educational policies of the previous government and has either attempted to improve upon their implementation or to move to the next logical step in the light of existing circumstances. Over the last 20 to 30 years educational development has been in the forefront of government policies. Education has been receiving an increasingly large share of the national budget. In most Caribbean countries the education expenditure is approximately 20 to 25% of the total recurrent expenditure of the government in any given financial year. Despite the continuity of the policy, the priority position of education and increasing expenditure, educational problems have persisted and education continues to be a matter of great concern to both politicians and people.

**Characteristics of the Educational System**

Historically, the educational systems of Caribbean societies have mirrored the social structures of these societies (Miller 1976).
Traditionally the social cleavages have been along racial lines (Henriques 1953). There has been a small upper and middle class made up largely of white and coloured people and a large lower class made up of Indian and Black People. This pattern has survived with minor modifications over the years. The minor modifications being the quantum of Indian and Black People who have been allowed upward social mobility into the middle and upper classes. Hence while these privileged classes are now more multi-racial in composition the underprivileged classes remains almost totally Indian and black.

Mass elementary education has had a long history in the Caribbean. It emerged consequent upon the proposed abolition of slavery in 1834. It was part of the provisions for emancipation. Elementary education was free and catered largely for the children of the ex-slaves. Mass elementary education now paralleled private fee-paying elementary education which catered to the children of the white and coloured population. Mass elementary education in the Caribbean developed simultaneously for different reasons as similar systems in the industrialized countries of Europe and North America. (Gordon 1963).

Teachers' colleges or normal schools were created at the same time as elementary education in order to provide local teachers for these new institutions. Through a system of pupil teachers and monitors the elementary school and the teachers' college became one system catering mainly for the black population. The most able and capable students from the elementary schools through the pupil teachers' system were accorded a higher level of education in the teachers' college which served the function not only as a professional institution providing teachers but also as the black man's secondary school affording him the possibility of moving into other professions than teaching.
In the 1870's and 80's high schools were created which catered largely to the children of the private preparatory fee-charging schools which catered to the children of the white and coloured population. These schools were linked to the British examinations system through the examinations of the Universities of London, Cambridge and Oxford. Because they catered exclusively for the children of the privileged section they became the elite institutions in education. Hence two parallel two-systems emerged, the preparatory school and high school on one hand catering to the children of the white and coloured populations and the elementary school and the teachers' college on the other hand catering to the black population. By the beginning of the twentieth century a scholarship scheme began to make it possible for a few students from the elementary school to receive high school education. The numbers however were extremely limited.

This dual system of education created in the nineteenth century continued with minor modifications and adjustments until the middle of this century. The new stimulus bringing about change was that of the move of these Caribbean colonies towards political independence following the second World War. In the wake of the Nationalist Movement there has been the intention to eradicate the dual system of education and to create a single system which catered to all children. In addition, there was the intention to significantly expand education especially at the secondary level.

The establishment of the University of the West Indies in 1948 marked the beginning of a new era in educational development. The University of the West Indies was established by the Caribbean and British Governments to provide the leadership cadre that would be needed by the Caribbean nations as they move towards political independence. This was followed by the expansion of high schools in the middle 1950's, the introduction of the Common Entrance Examinations which made entry to high schools based on merit.
and the provision of numerous scholarships through a free place system which now made it possible for children from the poorer classes who obtained places in the Common Entrance Examinations to take up these places. The expansion of primary schooling through a massive school building programme and the expansion of teachers' colleges to meet the new demands followed in the 1960's.

The 1960's also saw the introduction of technical high schools, junior secondary schools, senior secondary schools and schools for children in the 4 to 6 years old age group - basic schools. In addition to the physical expansion of the system and the creation of provisions at the early childhood, primary, secondary and University levels of education, there was also the move to transform the curriculum of schools at all levels making it more Caribbean in content and orientation. Curriculum development projects were undertaken in every territory. In addition, there was the attempt to provide greater welfare services to assist parents and children in attending schools. This took the form of grants to parents to cover the expenses of books, transportation, etc. the introduction of school feeding programmes and school uniform programmes.

In addition to the above, in some territories there was the move to implement compulsory education between the ages of 5 and 15. All these developments and changes occasioned not only much greater capital inputs which came through loans and grants from different agencies and governments but also in terms of local tax revenue devoted to education. This era saw the involvement of such institutions as the World Bank, the Canadian International Development Agency, the United States Agency for International Development, United Nations Educational, Scientific and Cultural Organization (UNESCO) in addition to the British Ministry for Overseas Development.

By the beginning of the 80's the educational achievements were quite commendable. Over 70% of the children between the ages of 4 to 6 years were enrolled in some kind of school. Approximately 95% of the children between the
ages of 6 to 12 years were enrolled in primary schools. Over 80% of the children in age group 12 to 15 continued to age 15 and over 50% continued in some type of secondary school until age 17. In terms of the Third World these are impressive statistics. It reveals a very high level of participation in the educational system. Notwithstanding these however, the following problems are evident:

1. Many students emerge from the educational system at age 12 and 15 being still functionally illiterate. The exact percentage varies considerably throughout the region but the figure, for example, for Jamaica is of the order of 40% at age 12.

2. Like their parents before them the vast majority of youngsters emerging from the school system each year are unable to find jobs despite the fact that they are more highly educated than their parents.

3. The education continues to be bookish and unrelated to the technological needs and the skills requirements of the economy.

4. Education provided in cities and chief towns is of a much better quality than education in other areas whether these be rural areas of Jamaica, Guyana, Dominica or Belize or the family islands of the Bahamas.

5. The educational system is still manned by a very high proportion of untrained teachers. Despite the large numbers of teachers that have been trained over the last twenty years the educational system has not been able to retain their services hence the schools continued to be manned by poorly qualified persons.

6. For a combination of school and social reasons boys perform much more poorly than girls at every level of the educational system. The Caribbean region is one of the few areas of the Third World in which
the number of illiterate males in the society outnumber the illiterate females. Boys tend to start school later, attend more irregularly and drop out earlier with lower levels of achievement than girls. Approximately 85% of the teachers at the primary level are females. Female teachers also outnumber male teachers at the secondary level.

7. While education had raised expectations for parents and children, their prospects for a better life in the society have not changed significantly.

The economies of all of the Caribbean nations, with the exception of Trinidad which is an oil producing state, have seriously suffered from the economic reversal that has manifested itself throughout the Third World since the middle of the 1970's. In recent years the educational provision in real terms has fallen. The pace of educational development and change has slowed. The societies would appear to have reached the limit of what they are able to provide for the education of their children and is at the moment looking for new and better ways in which to appropriate the existing provisions. The era of the 1980's appear to be of a different character from the era which commenced in the 1950's.

The Socio-Cultural Context

There are two dimensions of Caribbean society that are relevant to this discussion:

(a) The Caribbean is not populated by an indigenous population that has been practising a parent culture for thousands of years. The Arawaks and the Caribs, the indigenous Indian population of the Caribbean, were almost entirely eliminated during the period of Spanish colonialism prior to British colonialism. The present population of the Caribbean consists of descendants of old world peoples who came to the region over the last three to four hundred years. The emergent culture of the Caribbean is still at an embryonic stage of development.
The region is only now beginning to emerge from over hundreds of years of European colonialism, which is the only history of any significance or relevance to the societies. It is the combination of these two features which gives the Caribbean a uniqueness in the world community. In order to understand the socio-cultural context in which educational research is being institutionalized in the Caribbean it is necessary to examine these two dimensions in more detail.

The Colonial Dimension

Caribbean nations have not come to national sovereignty through armed struggle. The various Caribbean nations proceeded to independence through civilized and polite discussions around the conference table. This fact underscores two important points.

1. The extent to which the various Caribbean nations had accepted the British way of life and social philosophy. No where in the independence movement was there any attempt to dismantle the various structures that had been built up during the colonial era. Nor was there any assertion of getting rid of everything that was British in origin and essence.

2. The extent of the confidence of the British in the Caribbean people, that when they came to political independence they would continue to maintain the institutional arrangements that had been established during the colonial era.

The system of administration of the colonies was that Britain was always doing in the colonies what was being done in Britain itself. The people in the colonies therefore, accepted what was being done in good faith. They were convinced of the essential goodness of the motivation of the British and, therefore, accepted the arrangements that were made. The major criticisms were those of quantity and efficiency. The essence of the independence movement was
the assertion that if the various colonies assumed responsibilities for themselves they would do a better and more efficient job than the British administrators. Essentially political independence would mean greater efficiency and effectiveness in the operation of the nation. In other words, the nationals running their own country would do a better job than the colonial administrators. The assumption was not that they would do a different job.

The Traditional Mode

This outlook came from a particular mode of thought, 'the traditional mode', which was conditioned by the colonial era. Its basic elements can be identified as follows:

1. British norms of behaviour, performance and achievement were established as the standard for the colonies.
2. Phenomena in the Caribbean were measured against these norms.
3. Where differences existed these were perceived as deficiencies.
4. These deficiencies were perceived as an index of inferiority and was a source of shame.
5. The major objective of the society was to close the gap. Put another way, the aim and objective of the colony was to become like the mother country.

The major elements of the strategy to achieve this goal would be greater assistance from the mother country through greater inputs of men, money, machinery and methods.

In the post-independence period there has been a few minor adjustments to this traditional mode of thought. British norms and standards have been replaced by North American norms and standards, principally because of the proximity of the Caribbean to the United States and Canada and the increasing influence and interest of these two wealthy English-speaking countries.
The mother country/colony's dichotomy has been successfully replaced by developed/underdeveloped, first world/third world, north/south terminology. These reflect changes in styles of expressions rather than any substantive difference.

Irrespective of the terminology used the enduring characteristic of this mode of thought is its unquestioning, quantitative approach rooted in comparisons between the Caribbean and rich industrialized states.

During the colonial era the traditional mode was the dominant way of thinking about phenomena in society.

The Progressive Mode

Since the late 1960's a new mode of thought has emerged which for convenience of communication will be designated the progressive mode. It is used mainly by some University's intellectuals, teachers, playwrights, civil servants and professionals with marxist or radical ideological persuasion. It has brought a qualitative dimension to thinking and conceptualization of phenomena in Caribbean society and has infused an element of critical analysis. The essential element of this mode can be identified as follows:

(a) norms from Cuba and Russia sometimes, in combination with western norms, are employed as standards;
(b) local phenomena are measured against these norms;
(c) where differences are established these are interpreted as deficiencies and are critically analysed within a marxist framework;
(d) the magnitude of the deficiency is conceived as an index of exploitation by the former colonial or neo-colonial powers;
(e) the cause of the deficiency is established as structural factors related to the ownership of the means of production in the society;
(f) the cure is postulated as radical and fundamental changes involving the destruction of the old structures and the implementation of ideological solutions predicated by an application of marxist principles.
While this mode of thinking has brought a qualitative dimension to the way of conceiving phenomena in Caribbean societies and while this is far more penetrative and powerful in analysis there are a number of ways in which this mode shares a number of common features with the traditional mode. These can be identified as follows:

1. Both are employing standards, norms and conceptual schemes that are external to the Caribbean society. Both are drawing inspiration and authority from outside the Caribbean region. Both employ strategies of adopting and adapting solutions that have been worked out elsewhere. Both are lacking in creativity and inventiveness.

2. Both conceive of Caribbean circumstances within the context of deficiency. In the traditional mode this is interpreted within the context of inferiority; within the progressive mode it is interpreted within the context of exploitation. Both are equally disdainful of life as it exists within the Caribbean.

3. Both sets of scholars are from the same socio-economic background. The difference between them is mainly that of age.

The Nationalistic Mode

Emerging with the nationalist movement leading to independence, and growing stronger since, is another mode of thought that is hereby designated, 'the nationalistic mode'. It asserts that Caribbean society must conceive and interpret itself according to its own image, judge itself according to its standards and recognize its own authenticity. The argument is that although the society has its roots in European, African and Asian cultures, these have been put together in a melting pot and what has emerged is unique in character, legitimate in itself and valid. The essential features of this mode can be summarised as follows:

1. It seeks to recognize, develop and establish Caribbean norms and standards.
2. It accepts that not all differences between phenomena in the Caribbean as judged against European and American norms represent deficiencies or exploitation.

3. It seriously questions whether the Caribbean should strive to become like the so-called developed societies, except in technology.

4. Where deficiencies are recognized, structural and qualitative explanations and causes are identified.

5. Solutions are developed in accordance with the specifications of a particular problem within the local context.

6. Where borrowing is done from other cultures it is to meet a specific need as part of an overall solution and is not the total solution.

7. It rejects both the traditional and progressive tendencies to be directed by external authorities in the western or socialist worlds. Its only loyalty and commitment is to the Caribbean nations themselves.

As can be seen from the above, the essential thrust of this mode of thinking is to seek to interpret the world and Caribbean society through Caribbean eyes. It is to create and invent solutions rather than to borrow. In a sense these scholars run the risk of attempting to re-invent the wheel and also of becoming isolationists.

The Mix of Modes

A significant point to note is that these modes of thinking are not mutually exclusive. It is not unusual to find that the same person may use different modes in different circumstances. It is not unusual to find that in one situation a particular individual may adopt the traditional mode and in another the nationalistic mode. This underscores the state of flux, the degree of inconsistency and the degree of ambivalence existing in Caribbean society at the current time. Very few positions are fixed. The situation is very fluid.
The Cultural Dimension

During the colonial era the Caribbean was dominated by European culture. (Lowenthal 1972). The educated and ruling classes imitated that culture slavishly although Europeans represented but a small minority of the population. European culture occupied the super-ordinate position in the society while the culture of the majority of the population, African culture, occupied a subordinate position along with Indian, Chinese, Jewish, Lebanese and Syrian cultures. Political independence has removed European domination and with it the overt means of maintaining a minority culture. The educated and ruling classes have been left with a minority culture without either the external authority or the internal power to sustain it.

The creole culture - of the African and Indian population - has begun to emerge as the dominant culture in the society. What is recognized as essentially Caribbean - essentially Jamaican, Barbadian, Trinidadian, Guyanese, Antiguan, St. Lucian - is the very culture that hitherto was conceived as inferior, poor, bad, indecent, vulgar and shameful. The culture which now gives the unique identity and distinctive quality to the Caribbean was in the very recent past that which was snobbed, devalued and degraded by the educated and privileged classes in the region.

There exists in the region a gulf between the culture of the educated and the emerging dominant culture. There is a dichotomy between scholarship and the culture of the people. The current national culture has not inspired or informed education or the educated. The socialization process that has been operative has literally required persons who have been upwardly socially mobile to renounce their creole cultural background in order to assume the opportunities granted by education. This meant renouncement of the culture of the folk.
The effect of political independence is to set in train processes that are leading to a total transformation of the cultural status quo. Caribbean societies are passing through a period in which there is re-valuation and re-interpretation of many understandings and meanings within the society. In this regard the leaders of this movement are largely in the area of arts.

While the cultural identity and the soul of the society reside in the culture of the folk which is now assuming a dominant position, technical and professional competence resides among those people who imitated the culture that is now being replaced. The cultural dichotomy of the past has created compartments in which needed and essential elements of the society are now trapped. This poses enormous problems in the process of cultural transformation and the re-ordering, re-valuing and re-structuring of the various understandings and arrangements in the society. In order to illustrate the point being made it is necessary to quote an actual example. The example is taken from language/Jamaica. Each Caribbean state has a local creole. These creoles all have a vocabulary that is largely European. In Jamaica the creole has a largely English vocabulary. In the colonial era, English was the official language of the society. The creole was conceived as poor or broken English. English was the language of the educated and ruling classes. The creole was the language of the folk. At the present time while English remains the official language, the new interpretation and understanding of the creole, however, has recognized it as the language it is. Its morphology and syntax are West African although its vocabulary is mainly English. It represents the linguistic accommodation made by the African slaves in adjusting to the language demands of their new environment. The creole is the African component of the Jamaican linguistic heritage. It is certainly not broken English. 1

As a language it has its own rules of syntax, its unique way of codifying and interpreting experience. There are many concepts and ideas which are easily expressed in the creole which lose their nuance and subtlety of
meaning in translation into English. The creole is the language of cultural identity. It is the most effective means of communicating internally within the society.

With the new recognition of the creole has developed a reverse kind of discrimination. There are some people who have attempted to use the creole in place of English. This has become part and parcel of the new move to fundamentally question all the existing structures and to overthrow all elements that are perceived as colonial relics. However, there is no gainsaying that English has a significant place in the Jamaican society since it is one of the major languages of international communication. As a small country one, the language needs is to increase the competence of nationals to communicate in international languages. To attempt to replace English with the creole in international communication would be suicidal.

To the large mass of the population there is no question that English must continue to be the official language. English and the creole should coexist as they serve different purposes. But there are questions that are raised with respect to the teaching and learning of English in this new situation. Some of these questions are: Can a Jamaican, Barbadian, Trinidadian or Guyanese standard of English be recognized which is different from British English? How can these separate standards be defined? How can English continue to be learned and taught in the Caribbean without continuing to "anglocize" these societies.

This example serves to illustrate the need within Caribbean societies for a reversal of the conditioning processes of the past, for significant changes in the socialization process, for the bridging of gulfs that have existed between different segments of Caribbean societies and for significant re-valuing of various elements of the national culture.

The foregoing describes the political milieu, the educational setting, the social legacy and the cultural ferment within which educational research
has emerged in the Caribbean. It is the context influencing educational research and which is in turn influenced by this process.

**Existing Research Capacity**

Beginning with the Department of Education of the University of the West Indies in 1952 an educational research enterprise has evolved over the past thirty years. It is necessary at this point to describe the existing research capability in terms of the institutions, the researchers, the projects that have been undertaken, the support institutions and services that are in place, the provisions for training of researchers, the source of funding of research and the research climate which currently exists in the Caribbean.

1. Research Institutions

There are 22 institutions engaged in some type of educational research in the Caribbean. Table 1 below shows the location of these institutions. Table 2 shows the parent bodies which sponsor these research institutions.

While research is being done in twenty-two institutions in many of these there are different departments, sections or units engaged in educational research. Table 3 below shows the different types of sections and departments that are involved. Added to this list are the two regional projects, namely, "The Caribbean Educational Development Project" and "The Regional Pre-School Project". The term 'unit' is used as one of the synonyms of section, department or division.

From the information contained in Tables 1 to 3 there are a number of salient points that should be noted:

(a) The institutional capacity in educational research in the Caribbean is built around a small core of institutions, namely, seven educational research units. These seven units constitute the nucleus. While there are 42 units in all, the remaining 35 are involved in educational research in a secondary way.
(b) The institutional capacity is located mainly in:
   (i) tertiary education, mainly the University; and
   (ii) Ministries of Education.

(c) The units to which educational research is related as an ancillary activity are mainly involved in teaching, curriculum development, measurement and evaluation, testing and planning.

(d) Jamaica, in terms of quantum, has the largest share of research institutions.

2. Operational Styles

In examining the work of the 22 institutions involved in research a number of different patterns or styles of operation can be identified. These are as follows:

(a) The Basic Research Pattern: Here an individual is pursuing an idea which is mainly the creation of his own intellectual interest. The result has no immediate application although taken to its logical conclusion in a particular setting it could yield answers to particular problems. At best, in practical terms, it is a long shot. An example of this type of work currently being done is the work on "Dread Talk: the Language of Rastafarians in Jamaica".

(b) The Applied Research Pattern: Here an individual or group has worked out an idea or an approach. It has been logically deduced from some basic research and tested on a pilot basis within a particular setting. The pilot test having proved successful the efficacy of the new approach, there is the move to implement the strategy or model on a system-wide basis. An example of this is the "Curriculum and Language Arts Materials for Grades 1-3" developed by the Language Materials Workshop in Jamaica.

(c) The Research and Development Pattern: In this style research provided the rationale and the basis on which strategies, materials and
procedures are developed concerning a particular service. Through these research and development activities new policies and procedures are established for the delivery of a particular service in a given setting. The research and development activities and the operation of the service are integrally related. Research provides the inspiration, the leadership, the guidance for the development of the strategies for the operations of the service. An example of this is "The Regional Pre-School Project" and "The Community Nutrition Education Service" offered by the National Nutrition Centre in Barbados.

(d) The Service Pattern: In this style a client comes with a concern and contracts with the research unit, say of the University, to solve some problem, evaluate some project or investigate some concerns. The unit accepts the contract, carries out the investigation and produces the results for a fee. An example of this is the Evaluation of the Shift System requested by the Ministry of Education, Jamaica and carried out by the Research and Higher Degrees Section of the School of Education, Mona.

(e) The Support Service Pattern: In this style some activities are being carried out based on a priori assumptions. However, research is employed to provide information to ensure that the objectives are achieved. Research literally provides summative and formative evaluations to ensure that the different elements are contributing to the overall achievement of the goals in the determined fashion. An example of this is the use of research in the Project for Early Childhood Education in Jamaica that took place from 1966 to 1972.

(f) The Spin-off Pattern: In this style research emerges as a by-product of the execution of some service or task. For example, in the performance of social work functions, case studies are done in meeting the needs of various parents and children. From the analysis of these case studies inferences are made concerning the kinds of problems experienced by parents and children in, say, attending school. While the performance of a service is the major function it involves the collection of data, the analysis of which yields important research findings.
3. Researchers

There are 370 persons who have had training in educational research who are engaged in educational research either in a primary or secondary way. Table 4 below shows their location by territory.

Table 5 shows researchers as they are related to the parent bodies sponsoring the various research institutions.

Table 6 shows researchers as they are related to the various types of units engaged in educational research.

From Tables 4 to 6 the following salient points can be made:

(a) Only 20.5% of the researchers in the Caribbean are engaged full-time in educational research. The majority are engaged in research on a part-time basis.

(b) 51.4% are engaged in teaching and research or curriculum development and research.

(c) Researchers are almost evenly divided between Ministries of Education and the Universities in the region.

(d) Approximately 48% of the researchers reside in Jamaica.

Approximately 20% of the researchers in the region hold Ph.D. degrees, 65% Master's degrees and 15% are graduates below the Master's level. Areas in which there is strength in terms of research skills possessed are survey, curriculum, correlation, testing and linguistic research. Areas of weaknesses are classroom, observational research, experimental, longitudinal and action research.

4. Research Projects and Studies

In considering the studies undertaken in the region, one must include not only the projects undertaken by researchers in research institutions but also the work of students at various levels of the tertiary education system. Briefly, one can make the following observations about the research studies undertaken:
(a) The types of studies undertaken vary considerably. By and large, they are mostly individual efforts. There is very little team research.

(b) There is no consistency throughout the Caribbean with respect to the question of relevance, where relevance is interpreted to mean the congruence between the research done and the national concerns as identified by policy-makers and practitioners. In Barbados, Guyana and Trinidad there is a tendency for research studies to be more directly related to the concerns of practitioners and policy-makers than is the case with Jamaica and the Bahamas. In the latter two countries the dominant factor appears to be the particular interest of the researchers concerned.

(c) While there is evidence to show that some research studies have made dynamic and significant impact on both policy and practice much of the research that has been done has had little impact on either policy or practice.

(d) The number of studies resulting from the work of students in the Universities of the region far outnumber each year the number of studies produced by research institutions.

(e) There has been very little critical review and assessment of the quality of research studies produced from all sections of the research community in the Caribbean. State-of-the-art papers are almost non-existent. Leo-Rhynie (1980) is one of the few reviews of research that has been done.

(f) There is not a conscious and organized research community in the Caribbean which operates a professional forum through which researchers can interact and exchange ideas. Researchers in the region tend to relate more to their international colleagues in their particular discipline rather than they relate across disciplines to their colleagues working in their institution or country.
5. Support Institutions

In the development of an institutionalized framework for educational research necessary infrastructural support links have been established. These are libraries, documentation services, information networks, information data bases and computer facilities. It is necessary to discuss each of these in turn.

(a) Libraries and Documentation Services: Looked at across the region the library services are the best-developed, single infrastructural element. Trinidad appears to have the best service relative to educational research while the Bahamas has the poorest. However, none of the services in existence could be regarded as being adequate. The total number of books in stock, the number of periodicals subscribed to, space provided and the services given are all in need of significant increase and improvement. The most urgent case is that of the Bahamas. There is only one educational documentation centre in the region. This is located on the Mona Campus. Because this centre doubles as the Faculty library it has not been able, within the space and staff constraints, to develop fully as a documentation centre. The Documentation Centre, however, is the best source of unpublished research studies done in the English-speaking Caribbean.

(b) Information Networks: There is only one information network that has been established to collect primary source materials for social science and educational research. This is the Socio-economic Network in Jamaica. This network is still at an embryonic stage and its existence is better known by the information specialists than by educational and social science researchers.

(c) Computer Facilities: With the exception of the University Computing Centre at Cave Hill, the computing hardware that currently exists in
the region has the capacity to provide all the data processing needs of educational research probably for the next five years. The greatest problem lies in the area of software development. In this regard, the greatest need is for the development of packages and programmes related to the analysis of data generated in the field of linguistics and language research.

There are statistical packages available for psychometric and survey-type research. The best used is the SPSS package. There is the tendency for researchers to stick to the analytic tools available in this package even where there may be limitations because of the particular statistical method employed by the package. In the Bahamas, in particular, there is also a shortage of systems analysts and consulting programmers. However, this is generally true throughout the region. At the moment the two types of machines most commonly used in the region are the IBM 370 series and the ICL 1900 series.

In large measure researchers in the region are lacking in computing programming skills and as such, need to rely a great deal on programming specialists and systems analysts.

(d) **Links to Information Systems**: At the moment Jamaica has the only fully functioning computer terminal link to data bases in North America. Currently the Caribbean Industrial Research Institute (CARIRI) in Trinidad is upgrading its telex link to a terminal link. Shortly researchers in Trinidad should enjoy a similar facility. The Caribbean Development Bank in Barbados is about to institute a similar service. In Guyana and the Bahamas there are no links neither are there any immediate plans to implement such a service.

At the moment the University of the West Indies and the United States Agency for International Development (USAID) are looking at the feasibility of
of establishing satellite telecommunication linkages between the various English-speaking Caribbean territories for the purposes of University teaching, meetings and staff development programmes. It could be that automated national information networks in the various Caribbean territories could be linked by such a system for the purpose of sharing educational information.

6. The Training of Researchers

The training of educational researchers is one of the tasks of the Higher Degrees programmes of the Universities in the region. Both Universities have developed programmes in the field of education at the Master's level. The University of the West Indies has established a programme at the Ph.D. level. Both higher degrees programmes at the two Universities have followed the British tradition very closely.

(a) The Master’s Programme, University of Guyana: In 1976, as a result of a needs assessment survey done by consultants, the Ministry of Education and the University of Guyana, it was agreed to mount a Master’s in Education programme. The aim was to bring together persons who were currently employed in curriculum development, test development and research units of the Ministry of Education and promising individuals within the educational system in order to upgrade their skills in the areas of measurement and evaluation, curriculum development and research. The programme was executed by a specially recruited team of University professors who taught the respective courses at the University of Guyana in the mornings and worked as consultants in the respective units of the Ministry of Education in the evenings.

The concept was that the professors would work with the various units to orient them to the national needs identified by the survey and also to attempt to develop the degree programme from a task-oriented point of view. In training personnel in this way a number of important benefits were expected to occur.

(i) There would be no disruption of the work situation by the individuals being taken away from their jobs.
(ii) It would be more cost effective to bring a team of competent university professors from North America to Guyana than to send the students to universities in North America.

(iii) Because the programme was developed in the local setting it would be possible to train individuals so that they were conscious of national needs and of the particular social context in which they would have to work and be effective.

(iv) With the University lecturers teaching the courses also acting as consultants to the Ministry of Education the job situations should become more in line with the teaching programme.

The programme consisted of a core of courses including the following:
- Foundations of Curriculum
- Psychology of Learning and Teaching
- Research Design and Methodology
- Educational Statistics; and
- Educational Psychological Measurement.

In addition, there were specialised options from which individuals had to choose two courses. These options were: Curriculum Evaluation, Affective Assessment, Educational and Psychological Measurement (Advanced Course) and Applied Multivariate Analysis. The coursework was completed in the first year. During the second year students wrote a substantial dissertation based on research relative to their areas of specialization. Of the 28 persons who started, two left after the first year, one did not complete the course and the other was not awarded the degree. Finally, 24 students graduated with the Master's in Education in August, 1978.

In May, 1981 these 24 individuals were located as follows:

(1) twenty had remained in the Caribbean, 19 in Guyana and one employed to the Caribbean Examinations Council in Barbados;
(iii) four had migrated outside of the Caribbean;
(iv) of the 20 remaining in the Caribbean, 12 had received promotions in their jobs since graduation;
(iv) four of the graduates were involved directly in educational research.

Over the three year period concerned, migration of academics and the intellectuals from Guyana has been quite high. That eighty-seven per cent (87%) of the graduates from this programme are still in the Caribbean would indicate successful retention of these graduates by the Guyanese educational system.

It should be noted that the University of Guyana, Faculty of Education is still in the process of trying to mount a Master's degree programme on a continuing basis.

(b) The Higher Degrees Programme, School of Education, Mona: The higher degrees programme of the School of Education, University of the West Indies, Mona, commenced in October, 1964. At first it was the responsibility of the Teaching Section of the School. The responsibility now is that of the Research and Higher Degrees Section. In the 1980 to 81 academic year there were 124 students enrolled in the Master's programme and 15 in the Ph.D. programme. The majority are enrolled on a part-time basis. The number of graduates from this programme is shown in Table 7 below.

*There are four candidates who have recently submitted their Ph.D. Theses which are in the process of being examined. These students are not recorded either as being enrolled in the programme or as having graduated.

The number of graduates remaining in the Caribbean is shown in Table 8 below.

It can be seen that from the 53 graduates from the higher degrees programme at Mona only five have migrated, three of whom were English and returned to England, while one was Canadian and returned to Canada. Only one West Indian graduate from this programme has migrated.
It should also be noted that several of the M.A. graduates have gone to North America to read for the Ph.D. and so far they have all returned to the Caribbean on the completion of their programmes. This high retention of graduates in the region should be noted against the background that Jamaica has experienced the highest outflow of professionals during the last five years.

Table 9 below shows the areas in which these graduates are currently employed.

It can be seen from the Table that the majority of graduates from the higher degrees programme at Mona are employed in tertiary institutions including the University and Ministries of Government.

The policy of the University of the West Indies is to promote undergraduate study and to leave post-graduate work to the ingenuity and resources of particular faculty. The burden of the cost rests with the students. There are very few post-graduate awards available in Education or any other faculty. On the other hand, there is a great demand by students for these courses.

Because many have to pursue them on a part-time basis the drop out rate is exceedingly high. In addition, it takes quite a long time, an average of five years on a part-time basis, for students to complete the master's degree. While a successful programme at the M.A. and Ph.D. levels has been established at Mona and while this level of training has produced educational researchers, this has been accomplished against significant odds.

7. Journals

There are 28 journals published in the Caribbean which report research findings. Table 10 below shows the distribution of these journals according to countries.

Table 11 shows the journals published in the regions according to the type of audience they serve.

Table 12 below shows the size of the circulation of the journals.
During the period of the 70's there has been an increase in the growth of indigenous literature. While the growth of journals publishing educational results is a positive sign, and there is a growing tendency of researchers to communicate with each other through journals, the fact remains that the indigenous literature is still in its infancy. There is room for considerable growth and expansion. The permanence of this enterprise is not entirely assured.

The larger publications like "Social and Economic Studies", "Caribbean Quarterly" and the "Caribbean Journal of Education", have been recognized by the University of the West Indies for the purposes of promotions and appointments. This is a significant development since the tendency in the past was to accord such status only to research that was published in journals in the first world. With the recognition of these Caribbean journals, researchers are encouraged to publish their findings in the local setting in which the results are produced. Notwithstanding this however, there are many researchers in the region who still publish their research results in foreign journals. There is certainly no sense in which all the research done in the region, or even the majority of it, is published locally. In many instances there are good reasons since the majority of journals in the region are behind schedule, some by a considerable length of time. It is sometimes easier and quicker to publish abroad.

A preliminary and brief survey of the research papers contained in the technical journals reporting educational research in the region reveal the following:

(a) There are less papers published per year than work done. Many research projects only record and disseminate their results in mimeograph papers with very limited circulation. Only a minority of these are actually published and still less in the local journals.
(b) There is no common theme or concern which seems to unite or give coherence to the various research papers. There is a wide diversity of concerns and interests manifesting strong individualism.
(c) Most frequently the papers are concerned with deficiencies in Caribbean education as defined by some foreign paradigm and as measured by instruments imported from outside the region.

(d) Some papers manifest weaknesses in communication skills on the part of the researchers especially with respect to reporting their findings with thoroughness, clarity and conciseness.

(e) The inadequacy of the library and documentation service facilities and in some cases the lack of links to information data bases are manifested in the written papers in that literature is inadequately represented, or positions taken by authors are reported without mention of recent subsequent retreat or modification of those positions by the authors themselves.

(f) Some papers manifest methodological weaknesses with respect to sampling, the treatment of different variables, the use of instruments and in the overdependence on paper and pencil techniques as the major source of information for the various investigations. The majority of instruments used in the various research projects are, by and large, imported from first world countries and modified in a number of insignificant ways. Again, in many instances sufficient safeguards are not taken against the ways in which statements of respondents may not exactly coincide with the actual reality. Because of these weaknesses generalization outside of the very prescribed setting in which the research was done is extremely risky. Also in several instances there are weaknesses in the interpretation of results because variables that could very likely influence the phenomena being investigated were not included or were treated inadequately.

(g) The general impression given in most research papers is that researchers have been following rather slavishly ideas, paradigms, procedures and approaches that have been developed in first world setting. On the whole, there is a lack of ingenuity, inventiveness and originality. One comes away with the impression that the major bias of Caribbean researchers is
to probe questions that have already been answered elsewhere but for which the Caribbean version has not yet been described.

(h) Notwithstanding the above, there are several papers of quality published each year reporting research displaying originality.

3. Funding

At the beginning of the institutionalization process educational research was funded principally from two sources.

(a) international funding agencies;

(b) the University of the West Indies.

Although this pattern still obtains, the commitment of the University has increased significantly while that of funding agencies has decreased. The University's contribution represents indirect support of governments but over the last decade governments themselves have become more directly involved in providing both core and project funding.

In the 1960's International funding agencies provided core funding for the establishment of the two research units:

(a) The Institute of Education of the University of the West Indies; and

(b) The Carnegie Research Unit of the University of Guyana.

Both these institutional units were fully taken over by the respective universities at the end of the funding period. They are still functioning and performing the roles originally established for them by the agencies. While these units are not operating under the same names, having been integrated into the structure of the Universities' faculties, the integrity of their operations has been preserved.

In the decade 1965 to 75 international agencies gave modest support to several educational research projects. (It is necessary to point out that international agencies have never given massive support to educational research in the Caribbean.) The agencies that were most active in the
Caribbean region over this decade were the Ford Foundation, the Carnegie Corporation, UNESCO and CEDO. Most of the projects were concentrated in the area of curriculum research. The existing capacity of the region in linguistic research can be traced to the assistance given by the Ford Foundation to this type of research in the late '60s and early 1970s. Similar support has been given in the areas of Science and Mathematics by other agencies.

Over the last five or more years the number of agencies operating and the size of the projects have decreased significantly. At the moment the only educational research project of any size being sponsored by an international agency in the Caribbean region is that of the International Development Research Centre (IDRC) Project Primer in Jamaica which is operating on a grant of half a million Canadian dollars over three years.

The pattern has been for international agencies to fund educational research projects that have been consistent with particular themes as determined by the policy of the agency at a particular time. There have been times when the themes being pursued by a particular agency have not been in keeping with the needs of the Caribbean at that time. This has caused problems for educational researchers, in that while grants for projects are needed the funding is not available for the needs as they have perceived. It should be said that Caribbean researchers have been quite ingenuous in the ways in which they have circumvented this problem from time to time. Areas in need of support which have been neglected include Education as it relates to social stratification, the economy and policy as well as the training of educational researchers.

Another of the weaknesses of the project funding by agencies has been that grants have been made for relatively short periods, one, two or three years. In a few instances there have been extensions of grants for as long as six years.
The limitation is that because of the weak base of research in some areas, work has to be carried on for a much longer period of time before the desired objectives can be achieved. This is probably endemic to the very nature of research itself and may not be a phenomenon restricted to the Caribbean. The lack of congruence between the funding period and the time required to complete a particular process at times inhibits the full accomplishment of various objectives.

Another consideration is that at times projects have been implemented by agencies that have ignored work being done in the region. Consequently they have pitched their efforts way in advance of the particular stage of development or state of the art of that activity in the region. An example of this is the "UNESCO Curriculum and Teacher Education Project" of the 1970's. The overall results of such activity is the dissipation of effort and extremely limited success.

Because of the economic stringency experienced by most Caribbean states at the current time both project and core support for research have been kept to a minimum. The fact that one government has included educational research as part of a loan package from an aid source would seem to indicate that were such funding available at least some governments in the region would make use of that facility.

Over the past decade the indigenous support for educational research by governments and the University has increased. At the moment all core funding for educational research institutions in the Caribbean are from local sources. To a great extent the majority of the projects currently being carried out are also sponsored from indigenous resources. Because the funding available from local sources are of necessity small the projects that are currently being carried out are by-and-large very restricted in size and scope. While the increasing support of educational research by local sources is a very healthy sign the wherewithal of these sources to provide adequate funding is extremely limited.
9. The Climate Influencing Research

In examining the climate within which the research enterprise operates, it is important to note that the Caribbean version of colonialism had left a legacy of authoritarianism. Against this background a process which has its essence in questioning conventional wisdom is potentially threatening to those who wish to preserve the status quo. To those who see the need for change and are looking for answers research is accorded a place on a high pedestal to which great expectations are attached. To all concerned because of its newness it attracts attention.

In most Caribbean societies there is the freedom to enquire; there is the practice of freedom of expression and there are no overt or covert means used to prevent or inhibit any kind of research. What is researched and how it is done is largely determined by the individual, his interest, his courage and his particular viewpoint. This is not, however, so in every state. In Guyana for example, a repressive climate exists. There is at the moment confrontation between university academics and government. The impact of this on research is that those who are opposing the government literally specialize in policy research which challenges the position of the government. Those academics and researchers who try to avoid this confrontation concentrate their efforts on researching questions raised by practitioners which are neutral with respect to any policy implications. The impact of climate in this particular case seems to be that of governing the direction of research rather than either its quantity or its quality.

One factor which may be a phenomenon of small states and thus of particular relevance to the Caribbean is that of size and intimacy. The research community, educational practitioners, technical advisers of policy-makers and policy-makers themselves all come from the same social grouping and are well-known to each other. Because of this intimacy, research into policy questions
are fraught with difficulties. This is not because of any legal or official censure but rather from the fear of losing personal friendships or of endangering relationships. Policy research has acquired a sensitivity which may not be present in a larger society where there is a greater amount of impersonality. This factor is more evident in the smaller states like Barbados and the Windward and Leeward Islands than it is in the larger states, for example, Jamaica.

Another factor influencing the climate for research in the Caribbean is the implicit assumption that conventional wisdom and commonsense is a sufficient basis on which to proceed with respect to:

(a) the formulation of policy;
(b) the determination of practice and procedure.

Part of the colonial legacy in this region is that there is readiness to accept opinion as fact, to substitute hunches for conclusions from empirical evidence and to make changes without substantial investigation. Probably because of the small size of the states it is usually felt that the individuals know what the problem is. The general feeling is that research is going to yield what is already known. Again the deeply entrenched tendencies in the region to imitate rather than invent, mitigate against looking to research for answers and innovations.

Stages of Institutionalization

The Caribbean is a conglomeration of states that are not all at the same stage of development. Further within any single territory development is not uniform. One sector may be fairly advanced whereas another sector may exist at a very rudimentary stage. This lack of uniformity of development in a single territory and within the region as a whole makes it necessary to take the stage of development into consideration whenever decisions are being made about the Caribbean.

In applying the concept of stage of development to educational research in the Caribbean one is employing two criteria to determine stage.
(a) the level of institutionalisation in a particular territory; and
(b) the quantum of research output.

Using these two criteria it is possible to identify five levels of development:

**Level 1: The Windward and Leeward Islands**

These seven mini-states often referred to as the Lesser Developed States of the Caribbean (the LDCs) have little in the way of educational research capacity. Though their teacher training programme tends to sensitize teachers to educational research and while there are some persons trained in educational research working in these states, there is only one small private research institution. The quantum of research papers, projects and studies produced is exceedingly low. Support infrastructure for educational research is almost non-existent. It is not inaccurate to say that an educational research enterprise is almost non-existent in these states. Looking into the future in the long term one cannot envisage each of these states developing its own research enterprise. The best that could be expected would be that over time they would participate meaningfully in the regional research capacity which pay particular attention to their interests and concerns.

**Level 2: The Bahamas**

Here there are two institutions, the College of the Bahamas and the Ministry of Education that are engaged in educational research. Linkages have just begun to be made with the various support infrastructure - library, computer centre and documentation services. There is a nucleus of trained researchers living and working in the Bahamas who have a commitment to educational research. One could say that the Bahamas is at the incipient point of institutionalizing a research capability in education.

**Level 3: Barbados and Guyana**

Here research institutions have been established, the necessary support services are in place; the necessary linkages have been established between the research institutions and the support services.
However, the level of research output is low. The reasons for this low output differ between Barbados and Guyana. In Barbados the pre-occupation with service functions and a general feeling that the causes of the problems that exist are known mitigate against a higher level of output. In Guyana there is general malaise and low morale in the society which also permeates the educational research enterprise.

Level 4: Trinidad

Here research institutions have been established, the support infrastructure is in place, the linkages have been established between the research institutions and the support services. There is a small nucleus of researchers who are engaged full-time in educational and social science research. There is evidence that research has made an impact on policy and practice in a number of instances. However, the research enterprise is very small and its range of interests and activities have been limited to linguistics, curriculum and social science questions.

Level 5: Jamaica

The size of the research enterprise in Jamaica is almost that of the rest of the region combined. All elements of a support infrastructure are in place and functioning. In addition, there is a policy-making body, an Educational Research Council which seeks to give general direction and focus to research in the country. A wide range of research interests are pursued and the quantum of the research output is significantly larger than that of any other territory.

Having identified five different levels ranging from a point where there is virtually no research enterprise to the point at which the research enterprise is firmly established and operating, it is necessary to note that not even in Jamaica, at level 5, can the research enterprise be described as adequate to the task that research should perform relative to the educational system and the society. By and large, the research institutions are not
leaders of thought or practice in the educational system. There is a minimum amount of team research or large-scale projects tackling national problems in a multi-disciplinary way. There is very little experimental research and only few instances of longitudinal research.

If the stages of institutionalization are looked at relative to time the relative sophistication of the Jamaican research enterprise is to be expected since the process of institutionalizing research in the region began in Jamaica thirty years ago. Probably also this is as much as could be expected in thirty years. The point to be noted is that there is great scope and need for continued development.

**Has Research Made any Difference?**

Has educational research in the English-speaking Caribbean made any difference to educational policy or practice? The legitimacy of this question resides in the assertion that a research enterprise in education must justify its existence in making significant contributions to both policy and practice. Without such impact the research process and enterprise is bound to be called into question.

The simple answer to the question is yes. It is possible to cite numerous examples from around the Caribbean both at the national and institutional levels. For the purpose of this exercise five instances will be quoted. These are as follows:

(a) **Linguistic and Language Research** by Dennis Craig and his colleagues in Jamaica and its impact on language teaching in schools, Language Arts policy of the Ministry of Education and language materials in the form of textbooks, workbooks and teachers' guides in use in Grades 1 to 3 in the Jamaican school

(b) **Linguistic and Language Research** by Lawrence Carrington and colleagues in Trinidad and its impact on language arts curriculum policy of the Ministry of Education.
(c) Research into the levels of Mathematics achievement in schools in the Windward and Leeward Islands by Desmond Brooms and its subsequent impact on curriculum policy of the Ministries of Education and curriculum materials used in schools in the Windward and Leeward Islands.

(d) The use of Research in the project for Early Childhood Education in Jamaica coordinated by Dudley Grant in developing a successful intervention strategy to significantly improve the quality of basic schools and its adoption by the Ministry of Education, Jamaica and Dominica as the model for the national systems.

(e) Research on 70:30 system of award of school places to high schools in Jamaica by Errol Miller and its subsequent impact on the change of policy by the Ministry of Education, Jamaica to entry to high school based on academic merit in 1974.

The examples quoted above are illustrative and not exhaustive of research that has made a difference to both policy and practice in education in the Caribbean. In examining these examples there are a number of common threads which seem to indicate a common pattern. One is not attempting to say that once these elements are in place research will have an impact upon policy. There is no assumption or assertion of being able to identify necessary or sufficient conditions. There is no attempt to determine causality. However, correlations are being noted. It could be that these factors relate to the stage of institutionalization of educational research in the Caribbean, the size and intimacy of Caribbean society or possibly to the climate which exists in the Caribbean which influences research policy and practice. The common elements can be noted as follows:

1. **The Researcher**: In each instance there is a researcher who provides consistency and continuity to the research effort. He may be aided and assisted by different individuals and agencies at different times.
Their efforts may be discontinuous or sporadic but his is continuous, manifesting commitment to the particular idea and project. Originally the research was the brain child of this researcher.

2. **Time and Timing**: In the examples quoted the shortest time it took research to impact upon policy was six years. In the case of Craig it was fourteen, Carrington, thirteen and still continuing; Broomes six; Grant eight and Miller, seven. Also timing appeared crucial. The impact of research on policy assumes that the research results are available at the particular time when a policy change is contemplated. This is usually at a time when a large number of other changes are being contemplated. Usually this coincides with a change of government or change of Minister within the same government.

3. **Networks and Linkages**: In each instance through a number of different mechanisms involving networking, linkages were established between the researchers and research institutions on the one hand and the policy-makers and policy-making institution on the other. This linkage seems to play an important part in the adoption of the research and its translation into policy.

4. **Dissemination**: The dissemination of research results plays an important part in creating the climate for change by providing the logical rational framework within which existing policy can be criticized successfully. It also provides the rationale for the adoption of the new policy.

5. **The absence of evaluation**: While research may be used to establish the efficacy and effectiveness of the new strategy in a pilot setting, once it is implemented on a national scale it is assumed to be equally effective. There is no evaluation to verify this. Probably the experiences quoted here are too recent for such evaluation to have taken place. These may take place in the future. The point being noted is that research is used to test new strategies and methodologies within a pilot setting in order
to convince the policy-makers that it should be implemented in the system, but once it is implemented there is no check to find out if the claims made by the new strategies are actually achieved. It is a well-known fact that within the context of a pilot setting with the direct involvement of the creators of a particular strategy, performance levels can be obtained which may not be replicated when that very strategy is generalized to the entire system.

**Issues**

There are a number of important issues which arise from the instances in which research has made a difference to policy and practice. It is necessary to discuss these in some detail.

1. **Basic versus Applied Research**: Interesting light is thrown upon this controversy by comparing and contrasting the linguistics and language research of Craig in Jamaica with Carrington in Trinidad. Craig started his research in 1964. The new curriculum, the language arts policy and curriculum materials were implemented in the Jamaican educational system beginning in 1978. Carrington started his research in Trinidad in 1968 and has now arrived at the stage reached by Craig in 1972. He is just at the point of beginning to translate the research into detailed curriculum for Grades 1 to 3 and to produce the supporting curriculum materials.

One of the contributing factors to this difference in duration is that Craig in Jamaica had the benefit of a complete competent description of the Jamaican creole by linguists from the Faculty of Arts at Mona. Starting from this base he made certain logical deductions with respect to the educational implications consequent upon the differences and the interference that existed between standard English and the creole in the learning of language by Jamaican children.
He could therefore, proceed immediately with applying research to determine:

(a) the language that the child brought to school at age 6 or 7; and 

(b) the teaching model that would be most effective in this linguistic context.

Carrington in Trinidad on the other hand, only had a partial description of the Trinidadian creole. This was in no way as comprehensive or as reliable as the description available to Craig in Jamaica. Carrington had to carry out the basic research into Trinidadian creole himself, in order to complete the linguistic analysis before proceeding to determine the language of the children and the teaching strategy that would be effective in the Trinidadian situation. This meant that Carrington had to spend a much longer time in basic research before he could begin to tackle the problems that were his urgent and immediate concern.

At the moment in the Caribbean it is the common view among many policy-makers and practitioners that basic research is a luxury that cannot be afforded. Applied research is conceived as 'bread and butter' research which is the type that is required. The instance quoted above indicates that there are some problems in which basic and applied research happen to be different stages of the same process. In addressing some of the problems related to this phenomenon it is impossible to proceed to applied research before obtaining needed answers from basic research. To proceed in haste to applied research is actually a waste of time. The most expeditious action involves completing the basic research germane to the problem. This is an issue that funding agencies, policy-makers and practitioners need to examine with researchers in order to be able to chart the most effective course in any given exercise.

2. **Disciplined-oriented versus Action-oriented Research** : Both Craig and Grant began working together on a single project designed to improve the language learning of young children. A conflict arose between them which they failed to resolve. This matter was discussed thoroughly
within the Institute of Education and the director decided at the end of one year to separate them. Two separate projects were established which would allow each to tackle the problem according to his own strategy. The conflict consisted of the following: Craig attempted to attack the problem through discipline-oriented linguistic-type research—probing into the nature and morphology of the Jamaican dialect, the difference in structure between this dialect and standard English, the interference that was consequent upon these differences and the strategies that had to be used to overcome this interference. Grant on the other hand, focused on the fact that the teachers in the schools were untrained, inexperienced, poorly educated and lacked the necessary equipment and materials in the schools to teach effectively. Unlike Craig he had no intention of immediately creating any new knowledge about language learning or teaching. His concern was to improve the situation immediately by focusing on:

(a) measures to upgrade the quality of the teachers;

(b) materials needed by the teachers for effective teaching.

His approach was to use the best knowledge available at that time about language learning, translate it into terms that were understandable to the teacher and to show the teacher in detail how such knowledge and strategies could be applied in the classroom. While Craig's approach was discipline-oriented, Grant's approach was that of an intervention strategy in which research was used to determine the characteristics of the teachers and the learning situation and to evaluate the effectiveness of the treatment over time.

It is interesting to note that Craig's approach had the stamp and approval of his University colleagues while Grant had the approval of the practitioners and officials of the Ministry of Education. It is interesting to note that the approach of both persons finally resulted in highly successful projects. Grant's strategy of improving the quality of poorly educated, inexperienced and untrained teachers was remarkably successful.
Likewise, Craig's linguistic-oriented research was equally successful. Both improved students' learning. However, these two strategies could not be accommodated in the same project because the essence of their operations was so different.

3. The Researcher, a Critical Factor

In every instance where research made a difference to policy or practice not only was the research important but also the researcher. It would seem that to separate the researcher from his research is artificial. This factor might be related to the stage of development of educational research in the English-speaking Caribbean. At the present time large scale team research by institutions is not the order of the day. Research projects are invariably, the work of particular individuals even if those individuals are assisted from time to time by colleagues or research assistants. The point is that in this context who the researcher is, where he works, who he happens to know within the policy-making structure and how he is regarded by that framework, are as important as the choice of methodology, the thoroughness of the analysis of the data, the soundness of the interpretation and the clarity with which the implications of the research are related to current educational practice and policy. The recognition of the researcher by his colleagues, policy-makers, practitioners and international agencies seems to be as important as the research findings. This factor could explain why some research findings were not used during a particular period although they were relevant to various concerns at that time and provided necessary answers.

4. Linkages and Networks

In looking at the activities engaged in by researchers in the Caribbean a distinction was made between those who are involved full-time in research and those who are involved in research while also carrying out their responsibilities. It would appear that those other responsibilities,
especially teaching, are important in establishing linkages and in forming networks that are crucial to the translation of research into both policy and practice. Where researchers are also engaged in teaching at the higher degrees' level the researcher uses his findings in his teaching and in so doing disseminates his findings in his classes. In the Caribbean, persons enrolled in the Diploma in Education, M.A. and Ph.D. programmes are invariably located at strategic points in the hierarchy of the educational enterprise. By this means the researcher, through his past students, develops linkages with the policy-making structure. While being in research and other activities may reduce the quantum of research done by the researcher this dual responsibility could enhance the chances of the use of the research. It could be advantageous under certain circumstances for researchers to be engaged in both research and other activities. The danger to be watched is that the other activities do not preclude the conduct of research entirely.

5. The risk involved in using Research Results

All policy questions are usually sensitive but some are more sensitive than others. The use of research findings as the base to formulate policy contains an element of risk since no one can be a hundred per cent sure that the policy will have the desired effect. There are times when research results are not used in a particular situation, not because the implications for policy are not clear or because the research was not well done but because the policy-maker is not prepared to take the risk involved. In the instance quoted above where Miller was adviser to a Minister of Education, the Minister did not implement the policy simply because he would be the one taking the risk which was considered very great. Were it not for the fact that the following year Miller was in a position to take responsibility for the risk involved, the particular policy would not have been implemented. It is important to consider this factor of risk which the researcher because of his confidence in his work would be willing to take but the policy-maker would not. Again, this may be a factor related to the stage of development of
both policy-making and research in the context of the Caribbean.

6. Research, Funding and Policy Cycles

Funding, policy and research all seem to have different cycles. The funding cycle seems related to two primary factors:

(a) the economic circumstances prevailing at a particular time; and
(b) the priorities established by agencies and governments as their major concerns at that particular time.

Policy has its own cycle. In the Caribbean, policy changes are usually related to changes of governments. Most Caribbean territories are two-party democracies which change governments periodically. Sometimes changes are related to changes of Ministers of Education within the same government. In many instances, changes in policy have to await these events.

Research has its own cycle. Basic followed by applied research, operational model, building engineered in the context of the real situation and evaluation. It would appear that the possibility of research impacting policy relates to the ways in which these three cycles coincide.

Timing is a critical factor. It would appear that the funding and research cycles must coincide prior to the point at which the policy cycle is ready for significant change. One sequence of the interplay between policy, research and funding that has actually occurred in the Caribbean, can be summarized as follows:

Policy changes stimulate research which attracts funding. The research findings then form the base of new policies in the next turn of the policy cycle. Where research misses a "policy opportunity" it simply has to await the next turn of the policy cycle. An example is the case of the language research of Carrington in Trinidad, where in 1975 the system was ready for policy changes but the research had not progressed to the point where it could yield specific curriculum materials and policy.
Another consideration is where the funding cycle does not coincide with the research cycle. There have been several projects that have literally been left in mid air, to be continued by the ingenuous effort of a committed researcher, simply because the funding source has stopped funding while the project has not yet reached the point where significant results are forthcoming. This invariably increases the time taken to complete the project, assuming that the cessation of funding is not fatal to the project. The interface between policy, funding and research is in need of careful examination and study.

Quality of Research

There has been little or no critical review or assessment of educational research in the English-speaking Caribbean. The only review of educational research so far is that of Leo-Rhynie (1980). In this paper Leo-Rhynie attempts to review some of the M.A. and Ph.D. studies related to teacher education that have been done in the Higher Degrees Section of the School of Education, Mona. It is probably understandable that in the first 30 years of existence the research enterprise has been concerned more with doing research than attempting to review what has been done. One feels however, that sufficient has been done to date in some areas that justifies state-of-the-art reviews. Particularly because so much of the work that has been done has been unpublished. The published papers in both foreign and local journals represent but a fraction of the total work that has been done. Researchers about to embark on any new subject find it difficult to get hold of the work that has been done because of the very nature of the Caribbean region.

Statements that can be made about the quality of research in the Caribbean region in the absence of such reviews can only be of the most general kind. One could say that excellent work has been done in some areas and poor work in others. Such a statement could be made about anything anywhere. Statements about quality must of necessity be detailed and specific in order to provide guidance for those who would wish to use such information constructively.
One can therefore, only point the need for the assessment of the quality of educational research that has been done to date in the Caribbean.

**Concluding Comment**

As research has developed in the English-speaking Caribbean policymakers have used findings for different purposes. These can be summarized as follows:

(a) to legitimize policy changes;
(b) to justify educational expenditures;
(c) to ensure quality; and
(d) to act as a problem solving device with respect to some of the more intractable problems of the system.

By and large, researchers have benefited from the practice of research. In the University setting they have obtained promotions. Several University researchers have been recruited into senior administrative and policy-making posts in Government. From one point of view it could be said that those who have been generating new knowledge about the educational system have been coopted into policy-making and management positions within the educational system. Notwithstanding the above, the educational research process in the Caribbean is still in its infancy. The educational research enterprise is still extremely fragile.

Except for the oil producing state of Trinidad and Tobago the entire Caribbean area is currently reeling under the strain of the global economic crisis. The predominant concern of these countries is for economic survival. Inevitably, social services including education are being cut. By and large, educational research is conceived as a luxury, hence the fragile and infant research enterprise is facing a very stiff economic challenge. It is possible that some of the gains made in the building of educational research in the region may suffer loss during this period. This would be unfortunate since the educational research enterprise at this time in the history of the Caribbean is just about at the point at which
it can begin to make very significant contributions to the evolution of the
Caribbean education and Caribbean society.

Educational Research has emerged and evolved in the Caribbean as a result of two factors:

(a) political development as nations have emerged from the colonial era; and

(b) educational development as countries have attempted to institutionalize university education in the region.

In this context it is important to note that it is research in general and not educational research in particular that is being weaved into the fabric of Caribbean society. Greater importance and support has been attached to the development of research in the fields of agriculture, national services and medicine.

By and large, educational research to date has reflected the socio-cultural biases now dominant in the society. Most of the research has conformed to the traditional mode of thought prevailing in the society. Challenges to the status quo have invariably come from those with Marxist ideological learnings. A few researchers manifesting nationalist tendencies have broken new ground in some fields - language teaching and learning for example - but their efforts are largely unrelated. There is no sense of a research community consciously and deliberately attempting to address regional and national issues and concerns.

The inventive potential of research to create new responses and relationships and its reflective capacity which promotes the questioning of conventional wisdom is still to be meaningfully realised in Caribbean societies. To this point educational research has tended to be imitative rather than inventive although there are instances of original work which has far-reaching implications. Efforts have been concentrated on trying to replicate findings in the Caribbean which have been obtained elsewhere. Probably this should be accepted
in the context of being first efforts. However, it cannot continue to ignore the socio-cultural dilemma facing Caribbean societies. There is a strong desire by Caribbean people to perceive themselves and the world through their own eyes. The question is, how can research inform the process?

At the moment research is very much a follower and not a leader in Caribbean societies. Probably the fact that the vast majority of researchers are from the privileged classes contributes along with the infancy of the research enterprise to this situation. To what extent can research re-educate and re-orient researchers themselves? Can and will research become a leader of educational thought and in the growth of the developmental enterprise? These are important questions in attempting to contemplate the future development of research in this region.

In January, 1981 a meeting was held in Bridgetown, Barbados, which was attended by research managers and Technical Advisors from Ministries of Education in the Caribbean, the University of the West Indies, the University of Guyana, CARICOM, the International Development Research Centre, Ford Foundation, the United States Agency for International Development and the World Bank. The objectives of the meeting were as follows:

1. to bring together researchers in the English-speaking Caribbean to explore the possibilities of establishing linkages;
2. to identify the major constraints in doing and using research results in the region;
3. to identify available resources and explore possibilities with funding agencies;
4. to discuss and examine papers produced under the auspices of the Research Review and Advisory Group concerning research capacity and also the research process;
5. to explore with technical advisors to policy-makers ways in which educational research in the Caribbean can more effectively serve...
the policy-making process.

After deliberation of these matters over a period of three days the following recommendations and resolutions were agreed on:

1. That it was the opinion of the meeting that it was necessary for linkages to be established between educational researchers across several disciplines. However, in establishing these linkages and networks it was important not to create a new super structure that could lead to a weakening of existing structures. Accordingly, the Dean of the Faculty of Education in Guyana and the Dean of the School of Education of the University of the West Indies were charged with the responsibility of convening discussions on this matter with researchers of the several campuses and in the different countries with a view to determining the exact form that these linkages would take. Following these discussions the Deans would come together to correlate and coordinate the responses with a view to future implementation. One specific idea to be examined was the possibility of biennial conferences of educational researchers which would rotate through the several countries over the region.

With respect to the institutionalization of educational research in the region it was generally felt that some agency needed to perform a similar role in the Caribbean to that performed by the Ford Foundation in the Southern Cone of South America in the 1970's. Accordingly, the Universities of the region would approach the international Development Research Centre with respect to a long term project which would at least contain the following elements:

(a) short-term training in the Caribbean area to improve the mix of research skills in the region bearing in mind the current weaknesses.
(b) improving the opportunities for full-time training in the M.A. and Ph.D. programmes now operative in the region;
(c) assistance with the dissemination of research results including the translation of research findings so that they could serve the purposes of classroom teachers, teacher trainers and policy-makers;
(d) improving the support services for research with particular reference to the libraries, documentation services, information systems and computer facilities, especially with respect to software development;
(e) funding for particular projects which could be of wide regional application and significance.

3. The meeting was of the opinion that the Universities of the region should enter into discussion with the governments in the region with respect to the possibilities of regional loans for educational research. Particular attention would be paid to the needs and concerns of the smaller less developed independent territories that are emerging in the Caribbean.

Subsequent to this meeting consideration has been given to the establishment of a Caribbean Educational Research Review and Advisory Group as the most effective means of addressing the issue of bringing together educational researchers in such a way as to give direction, guidance and inspiration to the further development of educational research in the region. This Group would have as its terms of reference the following:

1. the fostering of an educational research community in the Caribbean;
2. the commissioning of state-of-the-art reviews intending to identify promising research results, existing gaps and of determining the quality of research done in different areas;
3. to give advice to governments, institutions and agencies engaged in educational research in the region;
4. to act as a clearing house for researchers, agencies and governments engaged in the research process.
It can be seen from the proceedings of the meeting that the recommendation centred on three of the most critical issues on Caribbean educational research, namely, the continued development of individuals as researchers in the Caribbean, institution building and funding. Given these ingredients there is every reason to believe that educational research will continue to evolve in the Caribbean into a very positive component of the educational enterprise.
BIBLIOGRAPHY


FOOTNOTE: For a full description of the Jamaican Dialect see
Bailey, Beryl, 1966 Jamaican Creole Syntax, Cambridge University Press, London; or
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<tr>
<td>Trinidad</td>
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<td>Countries</td>
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### TABLE 3

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<td>Teaching</td>
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</tr>
<tr>
<td>Curriculum Development</td>
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<td>Measurement, Evaluation and Testing</td>
<td>4</td>
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<td>Planning</td>
<td>3</td>
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<td>Special Education</td>
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<td>Pre-school Education</td>
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<td>Psychological Services</td>
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</tr>
<tr>
<td>Teacher Education</td>
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</tr>
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<td>Medical Research</td>
<td>2</td>
</tr>
<tr>
<td>Countries</td>
<td>Researchers</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------</td>
</tr>
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<td></td>
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<tr>
<td>Barbados</td>
<td></td>
</tr>
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<td>Eastern Caribbean</td>
<td></td>
</tr>
<tr>
<td>Guyana</td>
<td></td>
</tr>
<tr>
<td>Jamaica</td>
<td></td>
</tr>
<tr>
<td>Trinidad</td>
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### TABLE 5

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### Table 6

#### Number of Researchers in Various Types of Units

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<td>Social Science Research</td>
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<td>Teaching</td>
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<td>Curriculum Development</td>
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<td>Measurement, Evaluation and Testing</td>
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<td>Planning</td>
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<td>Nutrition Education</td>
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<td>Special Education</td>
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<td>Pre-school Education</td>
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<td>Social Welfare Services</td>
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<td>Psychological Services</td>
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<td>Medical Research</td>
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<td>Years</td>
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<td>Total number of graduates</td>
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<th>B. Master's Programme</th>
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<td>Total number of graduates</td>
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<td>Graduates deceased</td>
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<tr>
<th>C. Combined M.A. and Ph. D. Graduates</th>
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<tr>
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<td>Trinidad</td>
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### TABLE 11

**Audience Reached by Journals**

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<td>Informed Layman</td>
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70
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