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ABSTRACT

This report describes the internship scheme in Jamaica as a terminal experience following a period spent in the teacher's college acquiring substantive knowledge of the profession. Program emphasis is placed on laboratory and field experience as well as technical competence. Major features of internship include the development of a Teaching Internship Center and supervision by the Ministry of Education. Further features of the program, changes and modifications, justification of the strategy, use of a teacher task inventory, and program evaluation are presented. A 12-item bibliography is included. (MJM)

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INSTRUMENTATION TO IMPROVE TEACHER  
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## INSTRUMENTATION TO IMPROVE TEACHER EDUCATION IN JAMAICA

by Vincent R. D'Oyley\* and Sybil Wilson\*\*

History of Jamaican education supports the conclusion that over the years the island's educational development has been retarded by some of the same kinds of pressures that existed from the beginning of the system in 1835: inappropriateness of the curriculum, shortage of space and supplies for pupils, shortage of qualified teachers. It is these same types of conditions that, as recently as 1966, have prodded the political leaders to focus attention on the teacher preparation program and search for strategies that would be more effective in preparing teachers speedily and efficiently in an atmosphere of relevance for the burgeoning school population.

It is no mere accident that in a time of intense teacher shortage a pattern of internship for preparing teachers was resorted to. From the 1830 decade onwards, as teacher training continued to be systematised, much emphasis was placed on the training of monitors, probationers, pupil teachers, all of whom were receiving some training while assigned responsibility for varying degrees of pupil instruction. What began with the Mico Charity and the Anglican church in 1836 as an efficient and necessary way of training teachers was supported by the island government, when for the first time it began to subsidize programs of pupil teacher training undertaken by various denominational groups in the 1840's. The bureaucratically organised program of pupil teacher training of 1877 was preliminary to regular preparation in a teacher's college. The minimum age

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of a beginning pupil teacher was fixed at thirteen years; the maximum age was seventeen years. The only other requirements were good health, good character, and the indication of an aptitude for teaching. The government also stipulated where their training could take place. The distinction went to any school where a registered headmaster had shown signs of efficiency. He could have one pupil teacher for every forty pupils in average attendance or two for a principal teacher and one for each registered assistant.<sup>1</sup>

In the years immediately following emancipation some of the church societies tended to shorten the teacher training period and emphasized pedagogy or school management over academic content in an effort to graduate trainees quickly enough to answer the burgeoning demand for schooling. At intervals opposition to such a strategy was voiced on the basis that the teachers, at best ill-equipped, were receiving inferior preparation for the important task of teaching.

Over the decades the pupil teacher system became firmly entrenched as a period of pre-professional training for prospective elementary teachers. Although it was denigrated as insufficient for providing complete professional preparation and also for perpetuating the worst of the pedagogical skills through imitation, it was also lauded as most appropriate for affording prospective teachers experiences in the real world of the classroom with a wide range of real pupils, and it was particularly helpful in providing teachers for remote groups of villages and districts.

One may argue that it is in part from an extension of this practical involvement with pupils and teaching that has come some of the basic principles underlying the concept of internship in the teaching profession:

securing integration of theory and practice; providing a program of professional preparation in which learning is based upon doing; permitting gradual induction into the work of teaching; providing face-to-face contact with the realities of the practice of teaching;<sup>2</sup> and probably providing inexpensive pedagoques.

Distinctions between pupil teacher training and the recently instituted internship scheme in Jamaica must be made. Whereas the former has been a pre-professional training, internship is a terminal experience following upon a period spent in the teacher's college acquiring substantive knowledge of the profession. It is the major set of laboratory and field experiences required for acceptance as a qualified and competent professional practitioner. The intern is expected to have that degree of technical competence acquired from knowledge of his discipline, which knowledge he must now apply with pedagogical skills to be refined during internship experiences. It is interesting to note that during the early enthusiastic first years of the pupil teacher system educators sought, through rigid inspection and model school masters, to provide for their teacher trainees some of the learning experiences now advocated for internship.

#### Features of Internship

Although the conditions of demand and the aura of exploring new strategies were similar when the pupil teacher and the internship systems evolved, the latter, begun in 1967 almost a century after the former, is a more thorough and theoretically sound approach to teacher preparation. Internship, defined as "a period when the [prepared] student lives the

life and does the work of a teacher under professional supervision and guidance provided by the Ministry of Education,<sup>3</sup> was accepted by the Ministry as an answer to the crisis of teacher shortage--an answer that reflected some of the principles on which the recent James report is posited:

capable of speedy implementation; [related] to the immediate future, since it would be unrealistic . . . to construct a system [to last] indefinitely; [helped] to enhance the status and independence of the teaching profession and of the institutions in which many teachers are educated and trained.<sup>4</sup>

This period of a year, following on two in-college years, is spent as a teacher with full responsibilities for a class of pupils in a school approved by the Ministry of Education.

As conceived in 1966<sup>5</sup> the internship program would:

1. be monitored by a director appointed by the Ministry of Education who, in addition to guiding the program would liaise with the Institute of Education, the Institute Board of Teacher Education, the teachers' colleges, internship supervisors, internship schools and their boards and interns;
2. have a central organizing unit called the Teaching Internship Center through which interns, cooperating teachers, supervisors, education officers, and other professionals worked; each center to consist of a post-primary school (junior secondary, comprehensive, technical or grammar), a number of primary schools and early childhood centers located within a prescribed radius of the post-primary school; the

geographical area of the center to be small enough to allow supervisors to get to each school within the center without spending too much time travelling;

3. have assigned to an internship center students who had just completed a two-year in-college study program;
4. have each assigned student responsible for a class not exceeding forty pupils, do all the tasks expected of a full-time teacher, consult regularly with his internship supervisor, at least once fortnightly; do an action-research study approved by his supervisor, attend seminars to be organized by the supervisor and held in a center;
5. have an assessment program based on continuous evaluation of the student's teaching performance as this was observed by the supervisor during classroom visits throughout the year and towards the end of the year, by a panel of visiting assessors. The action-research was expected to contribute significantly to the intern's final appraisal;
6. encourage supervisors to regard their visits to the intern's classroom as occasions to offer help, not so much to record a grade, since this period was really to be a continuation of the intern's teacher preparation;
7. offer permanent teacher certification to the intern upon successful completion of the year of internship;
8. offer interns the opportunity to evaluate the program themselves upon returning to their respective colleges for a post-internship seminar for two weeks. The major purpose of this seminar would be to provide

feedback to the colleges that they may use to help make the two-year in-college courses more helpful to the students and more relevant to the field. This was seen as one way of integrating phases 1 and 2 of the training sequence;

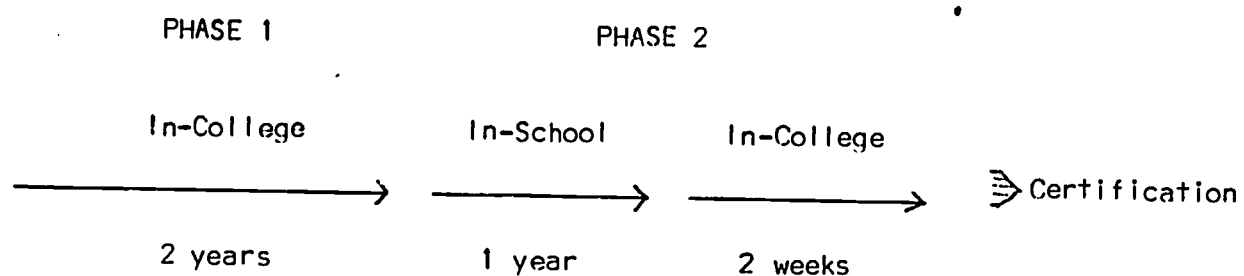


Figure 1. The Teacher Training Sequence

9. Include a pre-internship seminar for a week during the summer preceding the interns beginning their school appointments. In this college staff, education officers, supervisors, and staff of internship schools would participate and the purpose of acquainting the interns with the state of the work field they were about to enter would be served;
10. would recruit the majority of the supervisors from school staff, and who upon appointment would be specially trained for the job of supervision;
11. encourage a supervisor student ratio of 1:30 which should facilitate supervisors attending to the professional and personal needs of the



intern and being an effective public relations officer for the many institutions he had to represent on the job. He had the challenging task of interpreting a new program not only to those immediately involved in it, but also to the public, and a skeptical public at that.

The program was organized to encourage frequent interchange among people of various educational institutions in the island. The intern was expected to relate to the Ministry of Education through his supervisor, to his teachers' college through the visiting college staff, to the school in which he worked through its principal, to the community through an orientation committee comprised of members of the community. These individuals and institutions would work together through the Internship Center, diagrammed below to help the intern.

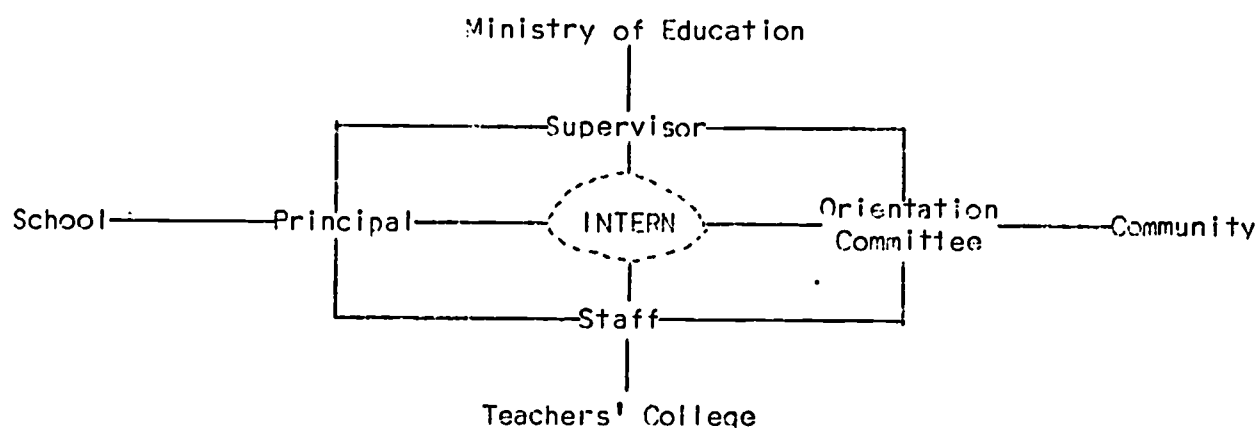


Figure 2. The Teaching Internship Center

In reality the new teacher training program for primary school teachers began to be operationalized in 1965 and by September 1967 the second phase of the "two + one" model as illustrated in Fig. 1 was ready to be implemented. In this phase there was very little departure from the proposal. The pre-internship seminar proposed to last for a week, took the form of four visits of one-and-a-half hours each, spread over a four-week period, to each of five participating colleges.\* All of these visits were shared by the program's administration staff of three.

#### Some Changes

Over the years there have been modifications in some aspects of the program. By 1971 the Internship supervisors had assumed major responsibility for orientation of prospective interns. Separate teams of supervisors visited each teachers' college once for a session of three hours. This visit was preceded by one from the Internship director lasting two hours.

In 1967, an administrative committee of three people shared in the organization, administration, supervision, evaluation of the program. In 1971, by which time the program was stabilized and procedures routinized, these responsibilities devolved upon the Internship director alone.

In 1967 Interns were assigned to schools by a placement committee as prescribed by the blueprint. Information to guide

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\*The teachers' colleges in which the program began were: Bethlehem, Mandeville, Mico, St. Joseph's, Shortwood.

such placement was provided by a total of seven different forms, filled in by interns, college staff and school staff. In 1971 the placement committee decided which schools received interns and how many they could have. Final assignment was done by the director. By now the number of forms were reduced from seven to three.

Orientation of the staff in internship schools to the Internship program was a crucial aspect of the implementation strategy. Then all such schools were new to the program. The Internship staff spent two days acquainting teachers, principals, chairmen of school boards as to how the scheme would work and the nature of their involvement therein. Over the ensuing years schools have been dropped and new ones added. By 1971 it was assumed that the Internship idea was integrated into the educational system well enough that its nature was understood; thus planned school staff orientation was unnecessary. It was expected that supervisors would do the information passing and interpretation as the year went by.

The two points at which implementation departed most drastically from the recommendations of the proposal were in the areas of involvement by the teachers' colleges and making operational the concept of the Teaching Internship Center.

The contribution of the teachers' colleges to this second phase of the teachers' training program, described generally in terms of cooperation, participation and collaboration was specified as:

1. Helping to prepare the handbook for the interns.
2. Helping to arrange the pre-internship seminar.
3. Keeping cumulative records for their students and transferring these to the Internship director at the beginning of each student's internship.
4. 'Selling the idea' of internship to the students during the first phase of their preparation course in college.
5. Visiting their students interned in schools during phase two.
6. Helping with seminars during phase two.

During the first year of implementation these tasks were undertaken to the extent that college staff was released for visiting internship schools and conducting seminars. However over the years such participation lessened gradually to the point where, in 1971, TIP\* staff, supervisors and interns were asking how to get the colleges to share more actively in the program.

The concept of the Teaching Internship Center as the focal point of the program through which school and community would relate; so would interns, school staff, supervisors, community personnel, college staff and TIP staff, was never operationalized. The author of the concept felt that such an organizational center would facilitate flexibility in program

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\*Where used in the text TIP is an acronym for Teaching Internship Program.

and encourage movement of interns among schools within a center.\* Instead of a cluster program\*\* growing out of the concept as was intended, a scatter program# developed with a center being a location having the facilities to accommodate the number of interns in a given geographical area for fortnightly seminars. Sometimes such a location is in a school, sometimes in a church hall.

### Seminars

All day seminars held fortnightly in each Internship Center provide opportunity for the interns, guided by their supervisors and other educators, to:

1. Discuss difficulties they have with their work in the classroom.
2. Learn about the structure and work of their professional organization.
3. Learn about the structure of the island's educational system.

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\*The reasons for the center were explained in some detail in an interview between D. R. B. Grant and the investigator at 30 Glendon Circle, Kingston, Jamaica, May 13, 1971.

\*\*In the interview referred to above, Grant explained a cluster program as one in which there is a local organizing center through which all internship schools in a given geographical area would relate to one another.

#In a scatter program each internship school relates directly to the main organizational center, the Ministry of Education, removed from the local area. This reduces interaction and opportunity for cohesiveness at the local level.

4. Relate what they learned in teachers' college to the situations in which they work and the experiences they are having.
5. Discuss relationship of in-school activities to local community needs and wider society needs.
6. Discuss the school's role in the community.
7. Be tutored in the skills needed to do action research.
8. Discuss and analyze their own attitudes towards teaching so as to better understand themselves and their teacher role.
9. Receive such help with identifying and doing instructional tasks as would serve to improve their pedagogical skills.

#### Justifying the New Strategy

Although one objective of the internship program was being fulfilled, i.e., more teachers were being put into the classrooms annually, this was not enough to justify the change in the traditional three year in-college teacher education program to the public. Severe criticisms of 'poorly prepared, Incompetent' teachers have been made of graduates of the internship scheme, a criticism based largely on the less than satisfactory performance of the primary school children on the

eleven plus\* and the Jamaica School Certificate\*\* examinations. In an attempt to heed these criticisms and uncover areas of teaching in which the interns felt themselves to be weak and inadequately prepared, an inventory of teaching tasks based on the P-I-E model of instruction was developed and administered to a representative sample of the 1971 intern population. One concern examined in the investigation reported herein was the help that the interns needed with various tasks of instruction.

The P-I-E model of instruction, a modification of the General Model of Instruction which rests on the premise that "the goal of instruction is to maximize the efficiency with which all students achieve specified objectives,"<sup>6</sup> was comprised of three components: (1) planning instruction; (2) implementing instruction; (3) evaluating instruction. Each component is reduced to a number of specific tasks a teacher does when he plans, presents and evaluates a lesson in the classroom setting.

1. Planning instruction. This involves setting objectives and the instructor deciding and clarifying for himself what he wishes the learner to do by:

- (a) Selecting appropriate objectives. The sources of these may be the student's interests, abilities, needs,

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\*The eleven plus is the screening examination for admitting students to secondary schools.

\*\*The Jamaica School Certificate replaces the series of three pupil teacher examinations and is a minimum qualification to a number of continuing education programs and professional fields.

aspirations; available resources; the teacher's competence with his subject matter; the stated aims of education for the society.

(b) Classifying objectives in order to know what level operations may be needed for a particular objective to be realized.

(c) Analyzing objectives in order to group them and thereby facilitate the organizing of resources for attaining the objectives.

(d) Specifying objectives in terms of behavior expected of the learners.

2. Implementing instruction. After the point at which to begin instruction for each learner has been ascertained, instructional procedures must be determined. Doing so involves:

(a) Selecting available materials.

(b) Preparing new materials as may be necessary.

(c) Developing a sequential plan for presenting materials so as to achieve the stated objectives.

The instructor uses a variety of techniques to develop a lesson, to stimulate interest, to encourage and monitor learner performance. He must determine the pace at which instruction proceeds and when shifts are necessary to accommodate each learner.

3. Evaluating instruction. The instructor appraises his learners to discover if they have achieved the stated objectives. This appraisal takes place while instruction ensues as well as



after, for knowledge of results is used by the instructor as a monitoring device and by the student as motivation. Assessing precisely is heavily dependent upon the clarity and definiteness with which objectives have been specified. Assessment along the way indicates to which point return must be made for any learner, if this is necessary, in order to ensure that he will achieve the final objectives of instruction.

The model, as illustrated, emphasizes continuous feedback and allows for a return to any of the three components, at any time, for a group of learners or for individuals.

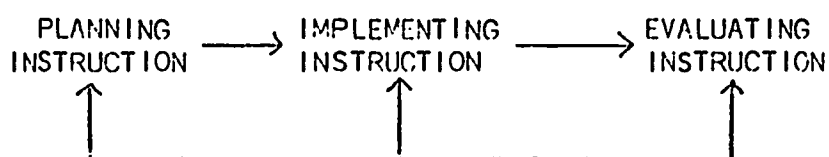


Figure 3. Flow Diagram of P-I-E Model

Based on this P-I-E model of instruction two paper-and-pencil scales, the H-N schedule and the S-H-R schedule were developed. Seventy task-items were repeated on both schedules. The H-N schedule asked respondents to indicate on a four-point scale of no help needed, a little help needed, much help needed, very much help needed, the degree of help they needed so they may cope better with daily instructional tasks in the classroom. Each point of the scale was equated with a numeral: 1 to 4.

The S-H-R schedule elicited from respondents their degree of satisfaction with the help they received during the two years in college for doing the seventy task-items along a scale range of 1 to 4: not satisfied at all, a little satisfied, well satisfied; very well satisfied.

In constructing the seventy items for these schedules the literature on teacher performance and teaching in general was consulted. A bank of 60 task items was compiled, sorted by the investigator into four groups according to the original GMI: Instructional objectives, pre-assessment, instructional procedures, evaluation and distributed to a group of 20 judges for further sorting. The resulting scales had 70 task items each, reclassified according to the P-I-E model of instruction as:

- 22 - Planning instruction (Items 1 - 22)
- 34 - Implementing instruction (Items 23 - 56)
- 14 - Evaluating instruction (Items 57 - 70)

In order to minimize the chances of responses on one schedule determining responses to the other, both schedules were combined as one instrument but with alternated positions. Thus one-half of the sample responded to the H-N schedule first and one-half responded to the S-H-R schedule first.

For an additional check for consistency within each scale the Vanderbilt Test Scoring Item Analysis Program No. CA9190 was used with each subtest of the H-N schedule, and Alpha reliabilities of .92, .96, .91 respectively were noted. The analysis was repeated

with the S-H-R schedule comprised of seventy identical items. The resulting reliabilities were .91, .95, .91 respectively. These values indicate a high level of homogeneity among the items that comprise each of three subtests of each schedule and a high coefficient of each item against its subtest.

One result of trial use of the scales with a small group of 12 first year teachers in two elementary schools in Toronto, Canada was that the four-point scale 'some' was changed to 'much' as it was thought this made for a clearer distinction. Items were rewritten, primarily for clarity without changing the meaning. None was re-classified; none deleted. Although there were a few suggested additions, there was not enough consensus to warrant inclusion of any on the schedules.

#### Using the Inventory

The first use of the Teacher Task Inventory was with a group of 161 teacher-interns in the elementary schools of Jamaica in February-April 1971; the intent being to seek answers to these six questions:

- Q<sub>1</sub> How much help did beginning teachers say they needed with tasks of planning instruction?
- Q<sub>2</sub> How much help did beginning teachers say they needed with tasks of implementing instruction?
- Q<sub>3</sub> How much help did beginning teachers say they needed with tasks of evaluating instruction?
- Q<sub>4</sub> How satisfied were beginning teachers with the help received in teachers' college with tasks of planning instruction?

- Q<sub>5</sub> How satisfied were beginning teachers with the help received in teachers' college with tasks of implementing instruction?
- Q<sub>6</sub> How satisfied were beginning teachers with the help received in teachers' college with tasks of evaluating instruction?

### Some Answers

To arrive at answers to the six questions posed, per cent of responses in each of four alternatives as provided by the rating scales was calculated. Of a total of 161 teachers 27% needed 'no' help; 45.5% needed 'a little' help; 21% needed 'much' help; 6.5% needed 'very much' help.

Table 1. Percentage of Responses on H-N and S-H-R Schedules According to Three Components of Instruction

PER CENT IN HELP NEEDED				TASK CATEGORY	PER CENT IN HELP RECEIVED			
None	Little	Much	Very Much		None	Little	Well	Very Well
27	45.5	21	6.5	Planning	7	27.5	43	22.5
35	45	16.5	3.5	Implementing	4	23	46.5	26.5
36	37	21	6	Evaluating	11	30	41	18

In addition to noting the components of instruction in which teacher interns expressed satisfaction with help received in college and indicated help needed in the classroom, specific tasks with which help was needed were isolated. Thirty-minute taped

interviews, guided by a semi-structured interview schedule, with 87 of the teacher interns elucidated even more the nature of the help needed and the dissatisfactions with in-college preparation.

#### Planning Instruction

Much help was needed with the planning tasks of setting aims or objectives for single lessons and larger units of work. Interns received yearly syllabuses of work which they were expected to teach. Although their own dissatisfactions with such syllabuses made it difficult for them to teach the matter with any enthusiasm, they were not ready to rethink and redo the syllabuses in any regard. As they indicated, they lacked the necessary skills, feared the system's resistance to change especially when initiated by novices, and were really too busy coping with the first year of teaching to extend themselves beyond what was required.

It is curious that so many of these teacher interns said that they could envision quite clearly what they wished accomplished during the lesson by their pupils but that they found it difficult writing the aims clearly and precisely. Setting objectives for one lesson was a task to be mastered; doing so for a week's work continued to be still difficult. As one interviewee put it, she "found a big gap there" and it took her some time to catch on. Shifting from making daily lesson plans to making weekly unit plans and vice versa was a source of "much confusion for some time." Another source of confusion, perceived as reason for

conflict, lay in the difference between patterns of lesson plans which the interns had learned to use in college and those expected and recommended by the supervisor. This conflict increased significantly if during the year there was any shift of supervisors, since by the fourth year of the internship scheme training of supervisors was overlooked, thus minimising there being a standardized approach towards the task of supervision as might have been desirable.

Being specific about aims of a lesson and communicating these aims clearly were major problems for many. "My problem is that I need to be more specific with my aims." "Although I may know what I am working after, I cannot write it out." It is constant practice in doing this and having corrections from principal and supervisor that have helped many along, "but I am still very poor at doing this."

Making teaching aids, providing enough materials for all pupils in a class, using available material effectively were tasks with which much help was needed by many. It was pointed out that "In college they tell you to go and make charts; but when you come out here making charts properly is even more important because you become aware of other people criticising them." The paucity of materials and the lack of safe wall space for permanent display of these materials when made adds to the burden of preparation. "When I have 55 children in my class, how can I make enough aids for all of them? I work out a way. I try to

see if I can get three of them to work together. It doesn't work. Each wants his own. So I have to make 55 every evening. It is difficult."

### Implementing Instruction

The techniques the interviewed subjects said they used in presenting lessons to their pupils coincided with tasks in the area of implementing instruction as indicated on the questionnaire. The need in this area mentioned by almost everyone interviewed was for more demonstration lessons in the real classroom situations in which the young teacher would be most likely placed once he was out of college. Acknowledgement of the little demonstration teaching done in college was criticized for its idealism, for "the teachers who were demonstrating did not take a whole class ... so they were able to manage the small portion ... we would like to see them really handling a class of 50 children; not 20; and doing that group work they really tell us about in there."

Real difficulties were identified with doing the "little things" that are not found in a book nor talked about in a lecture, but have to be improvised and can best be learned from someone sharing directly in the classroom experience with the young teacher.

"In college the emphasis was on matter. They taught us English, but they didn't teach us how to teach English. They

taught us some Maths, but they didn't spend enough time on how to give it to the children." These statements are adequately supported by the results of the data in Table 2 that shows that nearly all of the 87 teachers interviewed were having difficulties in presenting materials to their pupils in one or more of the subject areas.

Table 2. Teachers Interviewed Who Needed Help and No Help in Presenting Subject Matter

SUBJECT	NO. NEEDING HELP	NO. NEEDING NO HELP	TOTAL
Reading	73	14	87
English	67	20	87
Mathematics	59	28	87
Social Studies	42	45	87
Religious Knowledge	41	46	87

Dealing with extremes of abilities in their large classes was a task providing difficulties in both planning and implementing instruction.

#### Evaluating Instruction

For evaluating a lesson formal, written, supervised tests were used infrequently, usually in the middle and at the end of a term. The most commonly used evaluation techniques were oral



questioning, homework assignments, class writing, reading aloud, dramatizing, making drawings to convey what of a lesson had been learned. With the younger children much recapitulation was done through play. Prompting by the teacher or by another pupil was often the case in oral question and answer situations.

A few teachers emphasized pupils' correction and criticism of their own and their classmates' work as a helpful form of assessment. Mention was made of assessing intuitively aided by close observation. "If they show a great deal of interest, in some cases you can really look at their reactions and see that something has been taught. Take for instance, a lesson in Arithmetic. Last week I was teaching division and I started off with the five times table ... and there it was, a girl using it nineteen times, which I didn't really teach. So you could see that something was beginning to happen."

In evaluating instruction teacher interns depended less on formal testing, especially in the lower elementary grades and more on observation and intuition. Thus, whereas the questionnaire data revealed much need in making and using tests and record-keeping tasks, the interview data indicated that these tasks were done less frequently than the teachers themselves wished, and raised such questions as, was infrequent use due to lack of teacher skill or related more to system organisation and classroom traditions?

The observations regarding the discrepancy between the help required and help received by the trainee teachers, especially in the three areas of planning, implementation and evaluation, have been further borne out by a more compact statistical analysis of the data obtained from a sample of 161 subjects.

In the three aforementioned areas the observed mean discrepancy vector was  $\bar{d}' = [16.20, 35.90, 9.46]$ . Using the Hotelling  $T^2$  statistic, the null hypothesis of no discrepancy that the observed mean vector came from a population with a mean discrepancy vector  $\mu'd = [0]$  was tested against the alternate hypothesis of population mean discrepancy vector significantly different from the zero vector. The null hypothesis of no discrepancy was rejected at the  $\alpha = 0.01$  level of significance. In fact the observed value of  $F = 139.17$  was far in excess of the nearest tabulated critical value of  $F_{0.01; p3, N120} = 3.95$ . However, since the mere rejection of the null hypothesis does not show which of the discrepancy areas have contributed significantly towards the rejection of the null hypothesis, the 99% simultaneous confidence intervals were established for the three means to find out whether the hypothesized population discrepancy means of zero fall within the simultaneous confidence interval sets. These intervals clearly show that none of them contains zero. Moreover, on the basis of these analyses of the data it seems quite reasonable to conclude that these observations have come from a

Table 3. 99% Simultaneous Confidence Intervals For the Means

Planning	$11.40 \leq \mu_p \leq 21.00$
Implementation	$28.05 \leq \mu_l \leq 43.89$
Evaluation	$5.82 \leq \mu_E \leq 13.10$

population where discrepancy between the need for help and the satisfaction with help received does exist, at least in the three areas under discussion.

In the major investigation<sup>7</sup> for which the instrument described here was developed, beginning teachers in internship expressed a lower satisfaction with preparation received in college than is desirable. Could there just be a relationship between such a finding and Miller's comment that fear of lowered status arising from the recent expansion of teachers colleges has "definitely affected the attitude of training college staff to their students: to a disturbing extent students are being sold very short indeed"?<sup>8</sup>

#### Concluding Notes

The Teacher Task Inventory, developed and used as reported here, is a first attempt at providing an evaluative instrument that Broomes, in his conceptualization of a teacher-education model for the Caribbean (Jamaica included), presents as a crucial need, "not only to determine success or failure but also to identify and lay

bare the key variables"<sup>9</sup> of a teacher-education program. Use of the inventory with 161 interns allowed them to examine for themselves the teaching act as they operationalise it in the classroom and to locate some of their own weaknesses in teaching skills. Providing these beginning teachers with such a type of analytic instrument so early in their careers ought to be a powerful strategy for involving these people in their own professional development; for not only does it challenge them to analyse the teaching task for themselves, but also motivates them to help in determining the nature of in-service experience needed to improve their skills having located their weaknesses.

As a diagnostic tool the inventory may be used even in the in-college period by the student and the teacher educator to isolate components of the teaching act as well as specific teaching tasks. At another level of involvement, one essential at this stage of educational development, the inventory may provide a refined guideline to be used by professional and pre-professional groups as they engage in dialogue to investigate the nature of the teaching act. An equally urgent task is that of determining and constructing teaching strategies in an atmosphere of participation that involves various groups responsible for and responsive to the society's educational enterprise. It is pertinent to note here that one of the four main components of Broome's teacher preparation model is "mastery and use of certain teaching strategies which represent

different viewpoints of learning, and defining, constructing, and practicing elements of teaching strategies".<sup>10</sup> Why should teacher trainees not be involved in developing that which they are expected to master and practice? Encouraging such involvement would be one way to help the prospective teacher acquire the thinking and decision-making skills and attitudes that could make him enter the classroom less willing to accept the security that lay in imitating his older, experienced colleague and more prepared to open and explore viable avenues for change.

The recognition of the need for monitoring devices and feedback instruments to gauge the effectiveness of a program is not really new; nor is the concern over effective teaching strategies. The system of inspection was conceived by George Hill in the late 1830's as a quality control device in the national school system of training teachers. All the denominations followed the Anglicans in using some type of inspection for assessing their teacher graduates' performance in the classroom. Inspection as an evaluative measure accompanied by the payment-by-results system was really the accountability device more effectively organized by the bureaucracy after 1868. Both government inspectors and church ministers acting as school managers helped to ensure standard teacher quality in selecting teaching materials and textbooks, criticizing teachers' instructional methods and offering concrete suggestions for improvement. They saw one of their major tasks as that of

helping "to improve the quality of teachers' instruction and thereby to improve pupils' learning".<sup>11</sup>

More than one hundred years ago the teacher educator saw the need for monitoring devices built into the teacher-preparation program to improve the quality of preparation and to ensure high level performance. Today this need is no less emphasized; perhaps it is most vividly illustrated in the various competence models being recommended for teacher training. In these models the element of accountability is focal, an emphasis which has prodded the teacher educator to be concerned about his own effectiveness in preparing the teacher trainee.

Perhaps this instrument can help the teacher educator to define more specifically and evaluate his task described by Murray as: "to give the beginning teacher a sense of security when he assumes his full professional role and ability to direct his own subsequent education; and to assist the older practitioner to keep abreast of the times."<sup>12</sup>

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