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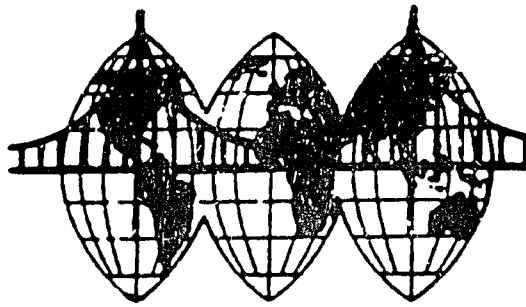
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BASIC RESEARCH AND IMPLEMENTATION

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IN DEVELOPING EDUCATION SYSTEMS

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Paper not formally reviewed.

B. R. I. D. G. E. S.

(SRI LANKA)

EFFECTIVENESS AND COSTS OF THREE APPROACHES
TO TRAIN ELEMENTARY SCHOOL TEACHERS IN SRI LANKA

(SUBJECT TO REVISIONS)

A COLLABORATIVE PROJECT
OF
RESEARCH DIVISION
NATIONAL INSTITUTE OF EDUCATION - SRI LANKA
AND
HARVARD UNIVERSITY
INSTITUTE FOR INTERNATIONAL RESEARCH
MICHIGAN STATE UNIVERSITY
TEXAS SOUTHERN UNIVERSITY - USA

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EXECUTIVE SUMMARY

Introduction

This document presents the report of a study on the effectiveness and costs of three approaches to train elementary teachers in Sri Lanka. Namely a pre-service program, the Colleges of Education, and two in-service programs, the distance education approach, and the long standing teacher training program the teachers colleges.

The first chapter presents a review of the literature on strategies for teacher education, including views from different parts of the world.

The second chapter presents a comprehensive background of three teacher education programs under study: pre-service education, in-service institutional training, and in-service distance education. In this section an overview of the historical origins of teacher education in Sri Lanka is presented. Next the origins of the different programs is explained. The goals of the programs are presented as well. A description of the type of students who enrolled in these programs is presented as well as the criteria for selection into the program, and the criteria for exiting the programs.

Chapter three presents the design of the study, and the model followed by the research.

Chapter four presents an analytical approach to looking at teacher training in Sri Lanka including different aspects of program implementation, and results of interviews with faculty and program directors.

Chapter five presents the results of measures of teacher achievement and performance in the classroom and discusses these results by the different training approaches. It also presents student achievement results. Statistical analysis of data and tables are included as well. Results of a survey on teacher motivation are discussed briefly.

Chapter six presents the results of the cost analysis, by the different approaches studied.

Finally the conclusions of the study and policy recommendations are included in the final chapter of the report.

Teacher Education in Sri Lanka Executive Summary

Background Information

Project BRIDGES and the National Institute of Education in Sri Lanka undertook a study on the effectiveness and costs of three different approaches to train elementary school teachers. The approaches are preservice (Colleges of Education), institutional inservice (Teachers College) and distance education. The study was carried out between 1989-90. Data was gathered on the following aspects and from the following sources:

- o Teacher candidates' achievement level at entry and exit from the programs and while teaching in the classroom. The source was a series of self-administered tests measuring knowledge and teaching skills in mathematics and mother tongue, and an attitude questionnaire. These instruments were applied to three different but comparable groups at the three points in time. An additional group of untrained teachers was measured at point three (classroom teaching). Two hundred and sixteen teacher candidates were studied at the entry point (TC 92, CE 100, DE 24). Two hundred and thirty-seven were studied at the point of exit (TC 78, CE 86, DE 73). One hundred and twenty-eight were measured when teaching in their classrooms (TC 38, CE 36, DE 43, UT 11).
- o Classroom performance in terms of mastery of subject matter, the use of teaching skills and resources, and teacher-student interaction, were measured via an intensive observational study of these teachers for two days. Two hundred and ninety-two teachers were observed (TC 82, CE 66, DE 100, UT 44).
- o The achievement level of mathematics and mother tongue (two subjects considered to be of utmost relevance on the island) of the pupils of teachers observed was measured via self administered and researcher-administered achievement tests. These tests were applied to 2nd and 4th year children in over 200 schools around the country. The pupils' sample is 2228.
- o The school context in which these teachers teach was measured in terms of the role of the principal, support for teachers in the school, availability and use of resources, school status (part of a cluster), and more general information about the school. The source was a self administered questionnaire applied to the principals of the schools visited. One hundred and sixty-five principals responded to the questionnaire.
- o Information about teaching practices according to the teachers themselves was collected through a self administered questionnaire. This questionnaire also included questions about the teachers' role in the school, their career path, support provided by the school, and their motivation. One hundred and twenty-eight teachers completed the questionnaire.

- o The pupils' background and information about their teachers' practices were measured through a self-administered/researcher-administered questionnaire applied to the 2228 students.
- o Information about program's history, philosophy, goals, and practices was obtained through interviews with program directors and faculty, as well as from documents provided by them. Five directors and 28 faculty members were interviewed.
- o The institutional, private and overall costs of the different approaches were also measured. Interviews with the program's directors, questionnaires and document analysis were used for this purpose.

The data was analyzed using multivariate designs (i.e., MANCOVA in SPSSx). All of the analysis controls for background variables. In the measures of teacher achievement for example, the analysis controls for age, gender, educational level before entering in the program, and for previous teaching experience. It was not possible to control for ability level of the teacher candidates previous to the teacher education program, however the drop out rate from the programs is so small that we can assume that the heterogeneity of the groups is kept constant throughout the length of the program (CE less than 1%, IC less than 5%, and DE less than 10-15%). In the classroom observation data the study controlled for the same background variables mentioned above and also the school type (congenial vs difficult) accounting for school context. Finally for the pupil achievement tests the study controlled for the pupils' background and for school type as well as for teacher background variables. The data and the relationships among variables reported have proven significant at the $p < .05$ level.

Effectiveness of teacher education in Sri Lanka
Key Findings

- Research Finding: Preservice teacher education seems to have a monotonic and positive effect through time over the inservice approaches on teacher candidates' achievement, as measured by written tests in subject matter knowledge and teaching skills over the inservice approaches.
- Evidence: After testing the achievement of teacher candidates at three points in time (entrance, exit, and classroom teaching) in subject matter knowledge and pedagogical skills, the preservice approach (Colleges of Education) candidates show a better performance overall than their counterparts in the other two inservice programs studied (Teacher Colleges and Distance Education). This higher level of performance is also seen in the preservice trained group measured in the schools. This finding seems to point to the superiority of the preservice approach over the inservice approaches in terms of improving and maintaining the level of subject matter knowledge and pedagogical skills in future teachers.
- Necessary Condition: The superior performance of the preservice approach over the inservice approaches, especially in subject matter knowledge, makes evident the effectiveness of the selection policy in place in this program which recruits only A/L graduates who cannot be admitted to the university because of limited space. The performance on subject matter knowledge can also be attributed to the emphasis the program has on teaching in this area as well as the teaching methods used based on current research on teaching.
The constantly improved performance of these teacher candidates in pedagogical skills, especially at the point of classroom teaching can be attributed to the program emphasis on the theory and practice of teaching, and to the full year of supervised practice this program includes.

Research Finding: Distance Education approach trainees seem to have the higher level of performance in written measures of teaching skills or pedagogy than their counterparts in the institutionalized programs, both preservice and institutionalized inservice.

Evidence: After testing the trainees of the three approaches (preservice, institutional inservice, and distance education) for teaching skills performance, Distance Education trainees seem to perform better throughout the extent of the training than their counterparts in the other two approaches. Their performance is only paralleled by the graduates of the preservice approach at the point of classroom teaching. This finding seems to point to the superiority of Distance education in Sri Lanka as an approach that fosters the development of pedagogical skills in their trainees. Similarly it points to the effectiveness of the preservice approach in helping trainees achieve a high level of performance once in the classroom.

Necessary Condition: The superior performance of Distance Education trainees throughout the length of the program and during classroom teaching, and the improved performance of the preservice trainees when teaching in the classroom, underline two important programmatic conclusions from these findings. One, the Distance Education approach as it is designed in Sri Lanka offers trainees the possibility of not only practicing while they learn (since they are teaching all the time they are enrolled in the Distance Education program), but also offers them the possibility of interacting with tutors and other teachers about their teaching in bi-weekly visits to the so-called regional centers (distance education is not a correspondence course). The distance approach also has monitors who visit the teachers in their classrooms and provides feedback on their teaching. Two, the preservice graduates observed in the classroom show a performance level parallel to that of the distance education graduates. This may indicate the effect of supervised practice with feedback in the classroom for a period close to a year (an essential part of the program). Both practices (learning while doing with feedback for the distance approach, and supervised practice with feedback for a year for the preservice approach, seem effective in improving and increasing the level of performance in pedagogy.

Research Finding: Graduates from the preservice and distance education approaches seem to have a higher level of classroom performance in terms of the use of effective teaching strategies and use of instructional resources.

Evidence: Intensive observations of teacher performance in the classroom of those graduates from preservice, and inservice programs as well as untrained teachers showed that graduates from the preservice and the distance education approaches seem to have a higher level of performance in terms of the use of effective teaching strategies such as assigning and reviewing homework, actively involving their pupils in the teaching and learning process, careful monitoring of students' progress during class, mastery of subject matter, effective teacher-student interaction, and effective use of instructional resources, than their counterparts in the institutionalized inservice program, or than untrained teachers.

Necessary Condition: The better teaching performance in the classroom of preservice and distance education graduates seems to be related to the innovative teaching techniques--which move away from lectures--followed by both approaches, as well as by the emphasis on supervised practice and feedback, and learning while doing. Both programs show the results of a newer curriculum emphasizing the application of teaching techniques and methods informed by recent research on effective schools.

Research Finding: Pupil achievement seems to be higher for those pupils of preservice teacher colleges and distance education graduates.

Evidence: Pupil achievement measures in the areas of mathematics and mother tongue in 4th year pupils seems to result in higher scores for those who are taught by trained teachers than by those taught untrained teachers.

Necessary Condition: Although it is hard to establish a link between teacher training and pupil achievement, this study collected information on intermediate links such as teacher behavior which seems to indicate that what the teacher does in the classroom seems to have a positive effect on pupils' learning.

In contrast with the group of untrained teachers observed, trained teachers and specially those trained in preservice and distance education approaches, were observed using teaching strategies that have been proven effective by previous research such as immediate feedback, student participation in learning, possess a mastery of subject matter, promote effective student-teacher interaction, and use resources effectively. Other in-school factors such as a supportive principal, supportive peers and resource availability, as well as teacher motivation, are important determinants of teacher behavior and should also be considered.

In spite of the similar performance from pupils of trained teachers observed, preservice and distance education graduates show a superior level of performance than their counterparts trained in teacher colleges and untrained teachers. The different performance of graduates of preservice and distance education may be due to the fact that both programs have been recently designed (during the 1980's) and incorporate in their curriculum teaching techniques and strategies that have been proven effective by current research on teaching. Similarly both programs follow a less traditional approach to teaching than teacher colleges. Teacher colleges have recently had the year of teaching practice formally eliminated from the program because of the generalized failure to provide a consistently effective practice.

Research Finding: When effects and costs are considered, distance education seems to be the most cost effective of the three approaches studied in Sri Lanka.

Evidence: In terms of effectiveness and costs per cycle (from the point of entrance into the program to the point of exit) considering the per unit "change" in outcome per dollar expenditure, the preservice program is 8.69 times more expensive than distance education, and the institutional inservice is 6.15 times more expensive than distance education. In monetary terms the cost of the preservice program is \$2243, for the institutional inservice is \$1588, and for distance education is \$258.

Necessary Conditions: Distance education seems to be the most cost effective approach to train teachers. This inservice approach, however, seems emphasize reinforcing and imparting pedagogy whereas knowledge of subject matter seems to be less stressed. This program seems to show that learning while doing with strong support from tutors and constant dialogue with fellow teachers, brings about a program that prepares effective teachers.

The preservice approach seems to be quite effective in Sri Lanka and it seems to fulfill the purposes of the reform in teacher education--to educate the whole teacher. The feasibility of this approach, however, over an extended period of time with a sustained level of quality, seems unlikely. This program is expensive and assumes a high level of qualifications from the teacher candidate. It is difficult to say how generalizable this program could be since it is based on the concept of training an elite group of teachers. This preservice approach however has been successful in placing a significantly large number of its graduates in difficult schools. These results, achieved through incentives such as enrollment in the program, the promise of high salaries, a prestigious diploma, and the commitment of three years service in a difficult school (which the government requests of these graduates), seem a serious step in the efforts to improve the quality of primary education by bringing young, energetic, and well prepared teachers to serve in poor areas.

Teachers Colleges seem to be the least adequate approach both in terms of effectiveness and costs. The antiquated curriculum and teaching methods lower the effectiveness of the program. Its institutional character and the pay leave given to teachers makes it quite expensive. Since this study was carried out the program has been reduced to two years of course work. Without supervised practice it is unlikely that these teachers can perform at the level of their counterparts in the other two programs studied.

- Research Finding: Teacher education makes a positive difference over no training in teacher education at all.
- Evidence: In measures of achievement in knowledge, skills, and attitudes, program graduates did better than untrained teachers with the same educational level. This pattern was observed as well in the teaching strategies used by these groups, and in the achievement tests applied to these teachers' pupils.
- Necessary Condition: Teacher education seems to make a difference when:
- o It combines selection strategies to bring excellent qualified candidates to be trained.
 - o It uses updated knowledge and teaching techniques that research has proven effective in previous attempts to educate teachers and in effective classrooms.
 - o Graduates are well prepared in subject matter knowledge or the program has a strong subject matter component.
 - o Graduates are well prepared in pedagogical theory and the program provides supervised practice and feedback.
 - o There is frequent interaction between what is being learned and what is applied in the classroom, with constant interaction with tutors and other teachers.

Policy Implications

o The preservice approach seems to be quite effective in Sri Lanka and seems to fulfill the purposes of the reform on teacher education -to educate a whole teacher-, however the feasibility of this approach over an extended period of time with a sustained level of quality seems unlikely. This approach is expensive and assumes a high level of qualifications from teacher candidates. On the other hand it is difficult to see this approach as a more general and inclusive one, since its exclusivity is one of its main attractive features. As the number of untrained teachers diminishes a preservice approach to teacher education needs to be implemented. The present attempt at teacher training sets a precedent for the character that preservice may take in the future.

o In terms of the impact that this preservice program seeks to have in the poor communities the strategy of training young, energetic, and well prepared teachers to serve in difficult schools seems to a serious effort in the effort to improve the quality of primary education in poor areas of the country. The incentives given to teachers to serve in these areas plus higher salaries, and the compulsive character of service after training, seems to make this a successful strategy.

o Distance education seems to be the most effective approach to train teachers when the costs are also considered. This in-service approach however seem to do better in terms of reinforcing and imparting pedagogy whereas knowledge of subject matter seems to be less stressed. This program seems to show that learning while doing with strong support of tutors and constant dialog with fellow teachers, brings about a program that seems to prepare effective teachers.

o Teacher colleges seems to be the less adequate approach both in terms of effectiveness and costs. The antiquated curriculum and methods of teaching plus the residential character of the program makes it quite costly. Since this study was carried out, the program was reduced to only two years of course work. Without supervised practice it is unlikely that these experienced teachers can perform at the level of their counterparts in other two programs studied.

o Finally all these three approaches must be seen in its own merits. As mentioned in the key findings, each approach has valuable knowledge to contribute to the field of teacher education in Sri Lanka. A combination of the best features found in each of the approaches may contribute to the development of a truly indigenous approach to teacher education likely to fulfill the societal, economic, and developmental needs of Sri Lanka's educational system.

FINAL REPORT. EFFECTIVENESS AND COSTS OF THREE APPROACHES
TO TRAIN ELEMENTARY SCHOOL TEACHERS IN SRI LANKA

Tatto, Dr. Maria Teresa
Michigan State University

Kularatne, N.G.
National Institute of Education

Dharmadasa, K.H.
National Institute of Education

Nielsen, D.
Institute of International Research

March, 1990

DRAFT.

FINAL REPORT ON THE SRI LANKA STUDY ON EFFECTIVENESS AND COSTS OF
TEACHER EDUCATION FOR ELEMENTARY TEACHERS

This research is the collaborative product of a large number of individuals both in Sri Lanka and in the United States. The following researchers were coordinators of the study.

Coordinator of the teacher education study in the United States:
Dr. Maria Teresa Tatto
Michigan State University

Coordinator of the teacher education costs study in the United States:
Dr. Dean Nielsen
Institute of International Research

Coordinator of the Teacher Motivation Study in the United States:
Dr. Weinning Chang
Texas Southern University

Coordinator of the overall teacher education study in Sri Lanka:
Dr. N.G. Kularatne
National Institute of Education

Responsible for the overall Sri Lanka Project in the United States:
Dr. William Cummings
Harvard University

Responsible for the overall Sri Lanka Project in Sri Lanka:
Dr. G.B. Gunawardena
National Institute of Education

Report submitted to the Harvard Institute for International Development
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This research was conducted by the Basic Research and Implementation in Developing Education Systems (B.R.I.D.G.E.S.) a collaborative project with the Research Division of the National Institute of Education (N.I.E.) in Sri Lanka. The project was founded through a collaborative agreement between the Office of Education Bureau of Science and Technology of the U.S. Agency for International Development and the Harvard Institute for International Development Contract No. DPE-5824-A-00-5076-00.

II. LITERATURE REVIEW

REVIEW OF RESEARCH STUDIES ON STRATEGIES OF TEACHER EDUCATION

National Institute of Education Sri Lanka

1.0 Concept of Teacher Education

The nature of teacher education is considered to be strongly dependent on the level of economic development, on the social context, and on the range of institutionalized teacher education programmes found in the contemporary world (Landsheere, 1987). In the midst of this diversity, there appear to be some common elements across teacher education programs. These basic elements or components have been described by different studies.

Teacher education is the vehicle for preparing those who wish to practice in the teaching profession. As in all professions this preparation involves on the one hand the acquisition of knowledge and the ability to apply it, and on the other development of the needed repertoire of critical behaviours and skills (Houston and Howsam, 1972).

In general, teacher education refers to the knowledge content and training for the acquisition of pedagogical skills. Both education and training should contribute to the development of professional attitudes and roles. In addition if teachers are to claim to be professionals rather than semi-professionals, training in specific skills must be supported by a general education which enables them to apply and adopt their knowledge and skills in all the varied conditions of teaching and learning which they meet (Linda A. Dove, 1986).

Teacher preparation requires a dual approach, on the one hand the student teacher must be helped to consider the educational basis of teaching, by thinking about the relationship between human knowledge, child development learning and society with its various aims and values. On the other hand he must receive training in how to exercise the essential skills of learning and teaching. Education and training must both be included for one without the other leaves the teacher incomplete (Farrau, 1984).

Teacher education is concerned with the development of the teacher as a person as well. The student teachers must be trained to form habits that will not only make them capable teachers but also help them to shoulder responsibility, show initiative, assist those in need and live lives which offer good examples to others. Practice makes perfect, and only as student teachers are given the opportunity to put these concepts into practice and receive constant encouragement in carrying out these activities while at college, will they develop the skills and habits they require.

Regardless of the content, there is a growing concern that teacher education is to be a life-long process. Those concerned with teacher education have begun to discuss teacher preparation not on terms of initial training followed by a modest amount of later up-dating but in terms of a continuing process of education and training throughout the career span. The concept of continuing professional education also involves a completely different view of

the relation between educational theory and practice. In the past, educational theory was considered some kind of amalgam of relevant aspects of theory derived from such disciplines as philosophy, psychology and sociology. The educational theorist would put together a collection of useful ideas relating them to real educational issues and problems where possible, and then encouraged teachers to put the principles into practice in the classroom (Denis Lawton, 1987).

The long established belief that "training is something that teachers are given at the beginning of their career to last them to the end" has changed. In its place came the realization that the changing demands on teachers, and the speed with which these changes arrive make it necessary to think of teacher education as a series of phases or cycles. These cycles are usually classified as follows:

- Pre-service training given before the teacher begins to teach.
- Induction given during the teacher's initial teaching experience.
- In-service training given as needs arise throughout the teacher's career (Ferranti, 1984).

Teacher education or teacher development can be considered in three phases; pre-service, induction and in-service. The three phases are now considered as parts of a continuous process (Landsheere, 1987).

Teacher education needs, among other things, to concentrate on innovation and research if it is to be meaningful and realistic in a changing environment. However, teacher education institutions have not been known for innovation. In the past they were often content to provide each student teacher with an enhanced general education and sufficient practical training to enable him to teach competently the syllabuses used in schools. Few felt the need to encourage initiative or innovation and some actively suppressed them.

The position is changing now as teacher education institutions are compelled to review their training objectives and methods in response to the new roles that teachers are expected to develop as they become staff in a growing number of schools. New approaches are being tried out for effective provision of teacher education. Some of these are:

- reform of the curriculum in training colleges.
- The use of micro-teaching techniques to isolate and perfect the various skills needed in teaching.
- Simulations and role play exercises to introduce students to management tasks without harm to themselves or their pupils.
- Encouragement to experiment with different styles of teaching.
- Greater emphasis on practical teaching.

- More use of individualized study methods and group assignments; fewer lecture sessions.
- Moving away from the concept of the well equipped demonstration school to that of a group of home schools with which the teachers' college has close working links (Ferrant, 1984).

There has also been a growing interest in the use of new modes for teacher education. It is now becoming more school based. Teachers and school managers both seem to prefer the system as it does not upset the organization of the normal school work as the student teacher is not displaced from the school where they work when they being trained. Experience in School Board Teacher Education has shown that its outcomes are more productive and programme costs are less expensive. A greater familiarity with individual problems of the schools make such training more relevant. This training which is conducted within the school setting also enables active involvement of the school principal and other supervisory staff of the school. The removal of teachers from the school for purposes of training is also avoided. Such programmes enable a greater degree of participation of school staff in problems identification, planning and execution. The training mechanism at the school level also permits greater continuity in training.

School based in-service education provides a good venue for teachers to develop on the job. It can meet not only the immediate needs of the teachers but also change their attitude towards teaching, and learning which has an important impact on pupil behaviour (APEID - UNESCO, 1986).

Professor Honeybone postulates the hypothesis that a teacher education programme based on an integrated mixture of college education, school experience and distance teaching might be on educational grounds a better preparation for primary school teaching than a full time two year course in a college (Honeybone, 1977).

The concept of teacher education needs to be dynamic in its broader perspectives. New dimensions ought to be brought into focus in line with current concerns, thinking, ideologies, and realities to meet the demands of contemporary times.

2.0 Strategies of Teacher Education - Concepts and Approaches

The term 'strategy' basically has military connotations, where it refers to the art of conducting a campaign or maneuvering an army. In relation to teacher education the term has similar implications, where the art of teaching is based on maneuvering, so as to stimulate certain kinds of productive behaviour of the learners. Teacher education could be conceived in terms of the modalities through which strategies have to be selected and arranged. In education they have to meet both the requirements of the nature of the tasks before the student, and the psychological requirements of mastering them.

Viewed in this way, there are four major strategies: (a) institutionalized training (b) school based training (c) distance education (d) a mixture or

combined strategy. Within these major strategies, there are minor strategies referred to as 'techniques.' Strong, Silver and Hanson (1986) define the concept in their article 'New Strategies, New Visions' - "[S]trategies are specific techniques, usually developed in research settings to enhance the fulfillment of specific educational objectives. We might best picture strategies as management systems that define the roles of teacher and student in a particular learning activity. Lectures, role playing, guided inquiry and programmed instruction are examples of teaching strategies.

By increasing the teachers' repertoire of these techniques, we provide him/her with a variety of classroom management systems for dealing with diverse content areas. As Strong, Silver and Hanson (1986) express, "[N]ew strategies provide teachers with new visions of their content areas, their students and themselves. They offer opportunities for creativity and autonomy in the classroom". Research studies by Dunn and Dunn 1974, Gregoire 1980, Hurst 1971, and McCarthy 1982, suggest that some teaching strategies are more effective with some individuals, and that teachers have a right to have these strategies made available to them. Tom R. Bone in the International Review of Education 1987 declares that, "[S]trategies for training teachers have to change in view of the fact that the role of the teacher has widened in recent times to include the community."

3.0 Modalities and Strategies of Teacher Education

3.1 Institutional Training

Institutional training in a Teachers' College offers the greatest scope for varied strategies of teaching, as there is a permanent base for the teacher-training involved and qualified teachers/professors, generally with wide experience as teacher-educators. H.M. Tillema and S.A.M. Veenman in their publication "Developments in Training Methods for Teacher Education" (International Journal of Educational Research) 1987, analyze training methods used in teacher education. Foremost among these are, (1) micro teaching (2) protocol materials, and (3) demonstrative learning, which were inherited from the traditional institutional teacher training and reached their peak of prosperity in the seventies. Other teaching strategies for the development of reflective teaching such as technology and active research as well conceptual instruction and intervention, non-verbal communication integrated teaching and thematic instruction are discussed in detail. The use of technology, particularly micro-computers in teacher education is discussed in other recent journals of education included in this study.

3.11 Micro Teaching

Tillema and Veenman (1987) present a number of research findings on micro teaching in their publication. Gordon McLeod (1987) refers to the "rise and fall" of micro teaching. This strategy became almost a fad in the 1970's. However its popularity rapidly declined and now research on micro teaching has almost ceased. McLeod's definition of this strategy is noteworthy. "A teacher education technique which allows teachers to apply clearly defined teaching skills to carefully prepared lessons in a planned series of five to ten minute encounters with a group of real students, often with an

opportunity to observe the results on video tape. Micro teaching is widely used in pre-service programmes throughout the world, and it focuses on training for special tasks, greatly expands knowledge, and there is an increased control of practice. Teaching is simplified in three ways - class size, lesson length, and task complexity are not fundamental barriers. Ten years after the introduction of micro teaching Foster, Heys and Harvey (1973) said that the use of video was the dominant feature about which micro teaching programmes were invariably organized. Stanford University and the University of Sterling Scotland carried out extensive research on micro teaching. However, there are only a few direct studies relating to the efficacy of this method. One of these is by Limbeshar (1965) who found that pre-service teachers with micro teaching practices performed better than those who did not have micro teaching practices. Regarding immediate feedback after a performance, Carlyn Everlen (1975) calls it "an effective pedagogical device although the acquisition of teaching competence does not always occur. Regarding feedback Gage says, "[E]vidence from the efficacy of feedback about teaching performance is fairly consistent. When the information is explicit, cleared and keyed to specific aspects of teaching behaviour, feedback results in the ability to perform according to a model of teaching (Gage and Wene, 1975). "The usefulness of frequent and precise feedback as an instrument for promoting the improvement of teaching effectiveness is not limited to micro teaching" (Flandey, 1970). Beetner and Johnson (1968), conducted an assessment of pre-service teachers' reactions to micro teaching practice. They found that the experience was rewarding. In 1973 Johnson reported that pre-service teachers who completed their micro teaching learned to relate to pupils but were deficient in planning purposefully for content. Which may be interpreted as a need to teach lesson planning more effectively. As a result in 1975, the creation of a training programme was instituted. Micro teaching was incorporated into the curriculum under the classification entitled "Content Strategies".

3.12 Integrated Teaching

H. Singhe carried out a research study on teachers trained through integrated and traditional methods of teaching. He found that teachers trained through integrated methods were superior in ability to those trained through traditional methods. (Indian Educational Review, Vol. XIII, No. 3, 1987). This shows the necessity to free teacher education from the shackles of traditional methods, giving it freedom to experiment with new strategies.

3.13 Protocols

The notion of protocols gained prominence from a publication by Smith et al. (1969). "Protocol materials are either audio, visual or written records of some classroom or school-related event, accompanied by theoretical knowledge that illuminates the event, making it more easy to understand." Most such materials developed in the United States were produced hurriedly in the early seventies. Few of these were subjected to evaluation and in most cases the evaluation was substandard. Thus the critical variables of protocol materials are still in need of study. Protocols have yet to strike the fancy of the majority of pedagogues.

Protocol materials derive from a cognitive rather than a behavioural position. The original intention was awareness and understanding, not training. Kleuken (1974) conducted an experiment to determine the effects of instruction based on protocol materials and training materials on concept and skill acquisition. Results indicated that a combination of protocol instruction and training (micro teaching) was consistently and significantly a more effective technique than either approach employed alone. However little research utilizing protocol materials has been carried out and most of it suffers from weaknesses that make the results suspect. Whether teachers will be able to use the protocol materials effectively is an open question.

3.14 Conceptual Instruction and Intervention

The idea of conceptually based training is that teaching skills can be acquired through instruction based upon practical training directed at the acquisition or function of concepts. Some people believe strongly that teaching skills are acquired through practice. Training based upon concepts relies on gains in teaching skills, if the teacher aims at conceptual change. The evidence of Gliessnan and Pugh in this paper shows that either instruction or intervention methods directed at conceptual change result in gains in complex teaching skills. Further evidence that the level of concept acquisition and skills are positively related is consistent with the hypothesis that concepts mediate skills. Conceptual learning can be described in terms of two different processes - concept acquisition and concept formation. A number of studies carried out on teaching from conceptualization show that training directed at change in concepts about teaching - skills is a highly dependable means of change in the skills themselves. If concepts are mastered, skills are likely to follow. It is also possible to find in the results of these studies - Mohlman, Coladavel and Gage (1982) an indirect implication for teacher education. "What cannot be clearly explicated cannot be acted upon."

3.15 Reflective Teaching

The Dictionary of Education edited by Good defines Reflective Teaching distinguished from rote memorization and mechanical performance of tasks. The ideas of reflective teaching began with John Dewey (1904) with his notion of "students of teaching." It was repeated by the idea of teacher innovators (Joyce, 1972) self-monitoring teachers (Eliot, 1975/76 - 1977) teachers as researchers (Stonehouse, 1975) and reflective teachers (Cruikshank, 1987).

K. H. Zeichner writes on "Strategies to produce reflective teachers." He refers to (a) action research (b) ethnography (c) writing and reflecting (d) supervision and reflection (e) curriculum development and analysis (f) reflective teaching on Cruikshank's model.

Supervision and Reflection

New supervisory materials and techniques are used by lecturers to provide reflective teaching - such as reflective discussions during or after teaching.

Curriculum Development and Analysis

Training the teachers to be active in preparing curricula which would call for reflection (Goodman, 1986).

Reflective Teaching on Cruikshank's Model

Cruikshank prepared 36 lessons for reflective teaching based on problem solving (15 minutes for each lesson). Research findings indicate that students who went through these lessons began to think and talk critically. The strategy of problem solving has been widely used after these experiments.

John Dewey and Reflective Teaching

In the early 20th century, John Dewey believed whole heartedly in reflective teaching. He upheld the view that pre-practice teaching laboratory experiences (early field experiences) should foster reflective criticism of educational purpose and instructional methods. This reflective spirit would in turn result in a more thoughtful student of teaching. He warned that premature placement of teaching candidates in classroom experiences before they had become reflective students of pedagogy would result in candidates rejecting the methods recommended at the teaching institute.

Action Research

Action Research has been defined as "an on the job" type of problem solving or research used by teachers and supervision to improve their decisions and actions. It is a form of self reflective inquiry undertaken by participants in a social setting in order to improve their own practices, the understanding of practices and the situations in which the practices are carried out (Kemphs, 1985). The cycle of action research has 4 phases. (1) reconnaissance, (2) planning, (3) observing, (4) reflecting within this cycle. Strategies are developed which shows "self-reflective inquiry" and are suited to the needs of the class. In the case of Ethnography students spend time in schemes understanding the teaching environment, studying various aspects of the classroom curriculum, teacher-pupil interaction with guidance from teacher educators. Beyer (1984) says, "[T]he use of ethnography contributes towards the development of teachers who are wide awake. "In Writing and reflective, Storer (1986) outlines ways in which teacher educators can deliberately use writing to facilitate teacher learning. The teacher's journal is one recommendation. Benham (1979) found that student teachers showed "less tendency towards custodial attitudes about pupil control and so used more pupil centered strategies like discussions in the classroom."

3.16 Demonstrations

Demonstrations are "instructional activities used to illustrate the method or process of presenting or establishing facts; doing something in the presence of them as a means of showing them how to do it themselves." Joyce Putnam and Betty Johns, in their article "The Potential of Demonstration Teaching as a Component for Teacher Preparation and Staff Development Programmes", say, "[D]emonstrations have multiple functions. They serve to illustrate teacher instructional behaviour, develop teaching behaviour, and they give an opportunity to assess cognitive processing and skill of pupils." According to Putnam (1984) teacher educators and trainee teachers both preferred demonstrations over all other types of strategies. However, there are problems associated with demonstrations according to Putnam and Johns. Demonstrations can only illustrate teaching techniques in themselves and they take time.

3.17 Non-Verbal Behaviour

A technique used in training is non-verbal sensitivity. Research on non-verbal behaviour in human communication has a well established place in Anthropology (Bird Whistle, 1970) and Psychology (Agyle, 1975), but its relevance for education has been acknowledged only within the last two decades. H. G. Klunzing and Ian Jackson in their article on "Non-Verbal Sensitivity in Education" confirm the value of this strategy. They show how smiles, nods, eye contact and a positive tone of voice can reinforce the messages sent out by formal teaching. Several recent studies such as that by Hodge (1972), Klunzing (1984) show that programmes which have training in non-verbal sensitivity have improved the quality of instructions (Klunzing & Fisher, 1986). Other strategies that have been subject to research are questioning, feedback, and scrutinizing.

3.18 Thematic Teacher Education

The case for thematic teacher education is stated clearly in Henrietta Barnes' article on "The Conceptual Basis for Thematic Teacher Education." Thematic education has been defined as a unified scheme of content on the basis of units of study. (Dictionary of Education, edited by Good). The case for thematic education rests on the assumption that learning to teach requires well organized schemata. For instance at Michigan State University one of them focuses attention on furthering in-depth understanding of academic disciplines by the teacher. The programme stresses conceptual understanding. Themes and purposes are subsequently reinforced by course work and practicum experiences.

3.19 Minor Techniques Questioning

The Fan West Laboratory for Education developed a mini-course to improve teachers' questioning skills. In field tests there was an increase in the teachers' ability to manipulate multiple choice questions (Borg, Kelly, Langor and Gall, 1970). The art of questioning has to be taught effectively in educational institutions for teachers. Feedback and structuring are left out.

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3.2 Teaching Practice

Teaching practice is a term used to designate only those activities involved in actual teaching by a student teacher. School practice on the other hand may include observation and participation as school activities as well as teaching practice. This is also termed student teaching.

School practice is an essential component of institutionalized training. Shower (1983) says, "[S]tudent teaching is usually identified by new teachers as the most rewarding and useful aspect of their pre-service professional preparation." In 1973 Peek and Tucker had reviewed research on teacher education and concluded that by the end of student teaching, there are some almost universally represented improvements in attitudes and in teacher behaviour compared with the field experience. This conclusion still seems generally accurate.

Griffin (1983) does not completely agree with this position. He says the role of practice teaching in the preparation of teachers may be over-rated. Research lends support to the value of peer supervision in practice teaching. Recent articles in teaching practice focus in the need for student teachers to be psychologically well adjusted during the period of student teaching, as theories of education focus on the psychological adjustment of the teacher as an attribute of effective teaching. Donna Gail says that in the University of Alaska, in cooperation with school authorities, student teachers were assigned to school before teaching practice. The students observed the experienced teachers' lessons and then carried out two lessons under the eye of those teachers. The students also helped class teachers with routine work. This experience gave the student/teacher confidence to face teaching practice. Jennifer M. Gore reviews Cruikshank's "Reflective Thinking" model for student teachers and comes to the conclusion that it is viable and efficacious in the context of modern teaching. Many new teachers go through teaching practice as a mechanical experience. This article warns the student against uninspired teaching. Tom Denton, in his article "Factors Affecting Quality in Teacher Training Programmes" focuses on the need for student teachers to be familiar with recent research before embarking on teaching practice. He also turns the spotlight on teacher-educators. They should exercise leadership through a continuous and independent search for new knowledge. They would thus be able to guide the teachers during teaching practice. M.A. Gunter, in her article "Investigating Student Perceptions in the Use of Video Taping in a Teacher Education Programme" gives an account of a programme where pre-service teachers are expected to spend an additional three hours in the classroom. In this student teaching programme, six models of teaching have been selected as providing a cross section of strategies. There are inductive and deductive models, synectics for teaching creative thinking and a similar model for group interaction students teaching once in a peer teaching environment and then in the classroom. The lessons are video taped, followed by discussion and evaluation. Recent articles focus on the importance of the discussion session after practice teaching so that students are made aware of the mistakes and remedial action is suggested. Peer supervision as well as supervision by teacher educators is used. Teaching practice is used by both pre-service and in-service programmes.

Pre-Service or In-Service Training

Tom Denton (1983) is strongly in support of pre-service training. He says, "Students who graduate from teacher education programmes are usually more effective teachers than college graduates who have little exposure to a pre-education preparation programme. The more courses they take before they begin to teach, the more effective they will be." The idea that teaching is an art that can be learned on the job and that teaching practice is a waste of time is a complete fallacy, according to Denton.

Induction of Teachers

Harley and Risenholtz (1984) state that the induction period of teachers is chaotic and the absence of support leads teachers to focus on strategies that control student behaviour rather than on those that facilitate student learning. Hall (1982) suggests that guidance should be provided to new teachers by master teachers who are aware of the problems that beginning teachers have to face.

3.2 School-Based Training with Special Reference to the SBIT Programme

The school-based in-service teaching for Primary teachers (SBIT) operates on the premise that the school is the most appropriate unit for educational change and that teachers not only have the capabilities to develop their personal and professional abilities but also need to be involved in the identification and monitoring of their own training needs.

The SBIT programme has varied from country to country. Nepal, Pakistan and Papua New Guinea were directed towards the training of master teachers, headmasters and curriculum advisors and other staff members. Those of the Republic of Korea and Thailand focused on training of classroom teachers.

Modalities

Training modalities fell into two types, namely training through workshop methods and actual exposure methods of classroom teachers. These were short courses from two days to six weeks.

3.21 Strategies Advocated

Several factors influenced the choice of strategies used: (1) the nature of the problem being solved, (2) the level of readiness of the clientele, (3) the resources available, (4) the readiness of trainees in the type of strategy, (5) convenience and feasibility, (6) time and extent of training, (7) costing, (8) topography of the country.

The choice of strategies also correlated with the readiness and the knowledge level of the teachers to be trained, as well as the socio-economic standards of the country concerned; countries with the greatest number of untrained teachers use group sessions according to the research literature. They also use discussion techniques. However, countries are free to decide on the strategy to be used.

All SBIT programmes are initiated by the school and are under the

leadership of the head teacher or by the Ministry of Education or Provincial Office, and activities are conducted by the school teachers. This is different from school practice in institutionalized training which is under the College of Education or teacher training institution concerned. Problem solving, a cornerstone of reflective teaching figures largely in the SBIT programmes.

3.22 Training Modes and strategies adopted by different countries

Nepal

In Nepal the quality of teachers produced was the ultimate goal of the programme.

(1) An "on the spot" primary training programme was initiated. The teacher trainees were observed in their own schools and the training session spread throughout the semester. It also utilized distance learning by video and a package of lessons prepared by a task force of teacher educators.

(2) Resource Center. Four to seven schools formed a cluster around one resource center. All schools were within 3 hours walking distance from the center.

(3) Short term training was carried out by the school. The content of the training programme was based on surveys and discussions with educational authorities. Strategies were selected according to the circumstances of each case. Evaluation was an indispensable part of the training.

Papua, New Guinea

Another interesting case is that of Papua, New Guinea. This country has long recognized the importance of school based in-service training. Every province is required to organize the equivalent of a National In-Service Training week each year, either as a block or staged over several days. There are two kinds of training undertaken for SBIT. These are training initiated, implemented and coordinated by the school or school clusters and training in the school with the design, plans and programmes coming from the National Department of Education, provincial committee or any other educational body.

The training at NIST week centered around a theme which was a sound idea as it established goals and correlated topics but the themes were often ignored. It was found that the most useful in-service training was in subject content, in order to improve the teacher's depth of knowledge. It was also revealed that there had to be changes in time scheduling, room use and teacher specialization to make SBIT more effective. It was also found that multi-media in service materials should be produced locally to suit the needs of Papua New Guinea.

In Korea in the Incheon City there was an emphasis on teaching strategies at two in-service teaching workshops. Various techniques such as research, lectures, seminars, discussions, demonstration, micro teaching, laboratory work and field trips were used. Teachers were given the opportunity to

become competent in operating machines, demonstrations and micro teaching were used in the teaching of basic techniques and methodology. A few case studies were carried out. Evaluation of these workshops showed definite expressions of satisfaction by the teachers themselves as well as a marked improvement in the teaching.

3.23 Assessment of the SBIT Programmes

As a mechanism for providing self reliance in the training of teachers, SBIT seems to be the answer. There can be no better type of motivation than that which springs from the students themselves. In SBIT the community is involved because the problems dealt with relate to the school which is a part of the community. Resources which cannot be derived from the school are generated through community involvement. SBIT is an in-service programme but there should be close cooperation between SBIT and pre-service. Teachers should be trained in the problem solving approach. Use of media and self instructional processing should be explained to reach a greater number of clients, according to the literature.

3.3 Distance Education Introduction

In a publication by the International Bureau of Education Hummell (1973) writes about developments, main trends and achievements in the field of education. Of particular relevance to the idea of learning at a distance is the conclusion that education must concern itself with the values of autonomy, equity and survival. It is important to provide individuals access to learning that might otherwise be denied to them. Young, Pereton, Jennings and Dodds (1980) emphasize why access to education is so important in their book "Distance teaching for the Third World." They note that education is intricately related to power. Through education, people gain power and consequently, freedom. There is a belief that the education received by the student who learns at a distance should be equivalent, as far as possible to the education received by a student of an institution. (Gough, 1980).

Definition of learning at a distance may mean different things to different people. To some it means correspondence education, to others, distance education or open learning. It is also related to the concepts of life long education and adult learning. Correspondence education has been an accepted educational practice in many countries throughout the world. While the absence of face to face communication between student and teacher has some disadvantages, there are compensating advantages. Geographical distance can be overcome and widely dispersed individuals can be reached.

Distance Study relies on non contiguous communication. The learner is at a distance from the teacher for much or even all of the time during the teaching-learning process. The components of distance education are normally a pre-produced course and organized non contiguous two way communication through print, mechanical or electronic devices.

Open learning courses are part of a wide range of innovations and reforms in the educational sector. Included are changes that aim to improve such things as the participation of learners, instructional design, methods of transmitting information and support of learners. "They are intended to allow wider sections of the adult population to compensate for lost opportunities in

the past or to acquire new skills and qualifications from the future. Open learning systems aim to redress social and educational inequality and to offer opportunities not provided by conventional colleges and universities. (Pg. 11 UNESCO publication, Open Learning, Mackenzie, Rostgate and Scupham, 1975).

Life-Long Education, Adult Education, Continuing Education

In a recent research on "Strategies for Life-Long Education" Himmelstap et al. (1981) suggests that life-long education involves formal and informal teaching activities throughout individuals' lives so that maximum development occurs at the most relevant times. "Adult education refers to adult learning processes or activities of part time, short term or specially arranged nature." These can be found highly structured or informal, with the learner assuming prime responsibility from the direction of the programmes (British Council, Ministry of Education, 1976).

Major Learning at a Distance Institution

The British Open University's cost effective and innovative approach to learning at a distance has been acknowledged around the world. Three programmes of study are offered by the British Open University undergraduate programmes, post graduate research-based studies and self-contained non-degree courses. Teacher education courses fall into all of these categories.

The use of course teams is a unique feature of the Open University. These items ranging in size from three or four to thirty members combine a wide range of expertise to produce multi-media teaching learning packages that form the basis of the material sent to students. The course teams go through several clearly defined stages in the production of course packages. The first stage includes the definition of objectives, formulation of syllabuses and selection of media. Following a draft and pilot stage of evaluation and development, testing is undertaken. The integration of correspondence material with communication technology, particularly radio broadcasting, is central to the entire process. The British Open University through the Open University Educational Enterprises Ltd., sells the correspondence texts, films, tapes and home experiment kits around the world.

Successful use of technology in distance education programmes is seen in the following examples.

1. The school of the Air Programmes in Australia where the video reaches children in remote parts of the country.
2. The in-service training programmes for teachers through radio and correspondence in Kenya are well known.
3. The University of Waterloo in Canada makes wide use of an audio taped correspondence course approach.
4. Telecourses are used in California, Florida, Ontario and Toronto. Televisions are distributed generally through broadcast television.
5. Teleconferencing is used in many states in the U.S.A. as well as in Germany.

A Combined Model

In Kenya a project was launched to train a large number of primary school teachers. The Ministry of Education was responsible for most of the in-service training. A school supervisory team was responsible for "on the job training" for teacher educators who would visit the schools, and for giving guidance. They would introduce new teaching techniques and keep the staff abreast of modern developments. Model schools would be established by the Kenya government. The untrained teacher started with attending two five week courses usually during vacation over two years at teacher training colleges. There were correspondence assignments and radio programmes in between. Approximately 2000 teachers took advantage of these courses every year. Staff members of the Teacher Education Extension Service participated in the preparation and running of the extension courses. They also regularly received copies of the correspondence assignments as well as teachers' reactions to them to enable the Teacher Education Extension Service to follow up and help the in-service trainees.

The teacher training colleges were expected to cooperate closely with the Teacher Education Extension Service by assigning tutors on a rotation basis to the new teacher training centers for their consultation.

Community Development Centers and Farmers Training Centers would be associated with TEES by participating in the course programme.

4.0 Implications for Teacher Education in Sri Lanka with Special Reference to the Bridges Project

The Bridges Project seeks to explore the effectiveness of three types of teacher education programmes in training primary school teachers in language and mathematics. The three modes of education investigated are:

1. Pre-service Training at the Colleges of Education

This is a three year course with a one year internship. Trainees are expected to have four 'A' level passes to be admitted to these courses.

2. In-service Training at Teachers Training Colleges

This is a two year course, and trainees are required a credit pass in their own special subject at Ordinary Level, plus the Ordinary Level in six subjects to be admitted. These trainees are teachers, and a minimum number of years of teaching experience, as laid down by authorities, is a prerequisite to admission. In the history of these colleges the minimum number of years of teaching experience has varied.

3. Distance Mode

The efficacy of the distance mode to train teachers is also being explored.

From the review of literature, pre-service training with induction of

teachers appears to be stressed, but in-service training is equally important according to the context, and could provide the answer to the "nagging questions of cost, relevance, feasibility and applicability" particularly in third world countries. Certain strategies are specifically suited to the Sri Lankan situation. Institutionalized training has now been divided into two categories - pre-service training at the Colleges of Education and in-service training at the Teacher Training Colleges. As noted earlier the entry requirements are higher for the Colleges of Education, whereas experience is essential for admission to the Training Colleges. The review of literature shows great emphasis on the knowledge base of teachers. Assessment of knowledge, particularly in the special subject, is the most valued criterion and the trend is for higher entry requirements relating to knowledge of the subject for institutionalized training (Speak and Britten, 1975).

Regarding teacher training strategies, micro teaching has waned in popularity, but there are studies that prove its efficacy. This strategy is widely used in the Teachers Colleges, and it is also utilized in school-based training. Its potential for teachers training in Sri Lanka is clear. The other techniques discussed here are also components of the Methodology course in Teachers Training Colleges.

Planning and Monitoring of Courses

The literature points to the fact that training of large numbers of teachers has to be carefully planned and monitored. Haphazard training of teachers will lead to greater confusion than non training of teachers. Strategies have to be chosen to encourage concept formation and reflective thinking. Material built around certain themes is useful according to the literature as "learning to teach requires building well organized schemata" (Barnes, 1987). The value of demonstrations is also clearly illustrated according to the literature. "Teacher trainees prefer demonstrations to all other types of strategies" (Putnam, 1984). The strategies mentioned are widely used in institutionalized and school-based teaching, but the latter is often combined with distance education according to case studies of the operation of the SBIT programmes. In certain instances programmes begin with intensive institutionalized training, then there is distance education. School-based training is controlled by the school, but the Colleges of Education also play an important role by offering the services of experienced teacher educators for consultation. In fact the resources of the whole community are co-opted to make the SBIT programmes a success.

In the case of distance education, a great deal of technology has been used even in Third World countries. Television, radio, programmed instruction, films, teleconferencing and other mechanical devices are cost-effective in the long run, although the initial cost of installing technology is high. One of the great advantages of technology is that it can reach large audiences easily. Little technology has been used in the Distance Education programmes that are under investigation, but the Open University has introduced technology on a larger scale. Radio broadcasts under the caption "Open Forum" are used for instruction in Science and Education. Teleconferencing equipment has been donated to the Open University by the Japanese government, and very soon the study centers will have the opportunity of teleconferencing with highly qualified educators from the center.

There are obvious disadvantages in distance education. Specialized strategies like micro teaching and non-verbal sensitivity cannot be taught through this mode. The teacher trainees consequently have more problems, as there is contact with the tutor only at the study centers once or twice a week, sometimes once a month. The role of counselors in distance education is underscored in the literature. Counseling can help the distance educators to overcome their academic problems and assist them in personal problems such as the lack of opportunities for specialization. If distance education is to make the right impact on teacher training in Sri Lanka, the appointment of counselors is an urgent need. The necessity for the introduction of cost effective technology is implied, as it has been successful in other developing countries.

School-based instruction may provide the answer to the need for large scale training of teachers, provided this is a well planned exercise. School-based programmes are less expensive than other forms of training, more productive and relevant to the needs of teachers.

In-service training in Papua New Guinea was evaluated and the results clearly showed that "training should not be an imposed centralized top down requirement". Teachers should be involved in both preparation and organization of school-based in-service training supervised by Head Teachers and Officers. As in teaching practice in institutionalized training, a new feature suggested is "peer supervision" which has proven to be a success. In order to maximize academic learning and employ a repertoire of teaching strategies, teachers must master the management of the classrooms.

A combined strategy for training the proposed new recruits to the teaching service may be the best as in Kenya where institutionalized training during the holidays was combined with the distance mode. The radio was largely used. Broadcasts were allocated a fixed time slot in the early evenings every weekday throughout the year. The World Bank Report (1977) says, "[W]ith the advent of the battery powered transistor radio, about 90% of the population can receive radio broadcast."

Whatever mode is adopted, it has been confirmed that there appears to be little commonality across the countries examined in terms of teacher education programmes. No national standards exist for the selection, admission and evaluation of students. Many different professional texts are used in courses

and skill requirements differ substantially. The implication is clear that developing countries like ours have to avoid such pitfalls and ensure that standards are maintained.

According to Schramm (1972) there are even more important questions than which medium is the best of delivering information. What is all important in Schramm's view is the instructional strength of the material, the cultural and situational context, the student access to the media and the available resources. In all modes of teacher education the relevance and clarity of the context, individual abilities, motivation to learn, pupil attention and interest in the subject, and respect and affection for the educator are the crucial values that influence the process of learning.

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III. STRATEGIES FOR TEACHER EDUCATION IN SRI LANKA

STRATEGIES FOR TEACHER EDUCATION
IN SRI LANKA

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STRATEGIES FOR TEACHER EDUCATION IN SRI LANKA

Introduction

The last four decades have witnessed a great stress being placed on teacher education in Sri Lanka. This effort appear to have borne fruit as nearly 71 percent of the teachers have now been professionally trained.

Until 1984 teacher education courses were conducted on an in-service basis, as the rapid expansion of education had necessitated the recruitment of a large number of teachers who could not be immediately trained before being posted to schools. This has resulted in a backlog of teachers who have not yet received a professional training.

A number of strategies are being utilised at present to train teachers for the school system in Sri Lanka. The following are some of the major strategies employed in the training of teachers. (Gunawardana, 1988).

1. One is the three year institutional training programme which is provided in 16 Teachers Colleges for non-graduate teachers in service.
2. A second major strategy that has been used since 1983 is the Distance Education Programme. For many years the annual intake to the teaching profession had exceeded the annual intake to the Teachers Colleges for in-service institutional training and this has created a backlog of untrained teachers. As provision available in Teachers Colleges could not meet the demand for training and as the school system could not release a large number of teachers for training at the same time this mode of training was selected to accelerate the process of training.

3. Since 1985 a pre-service teacher education programme is being offered at seven Colleges of Education. This course seeks to implement the accepted policy of progressively giving up the practice of recruiting untrained teachers into the teaching profession.

4. Untrained graduate teachers are provided with one year's Post-Graduate Diploma in Education programme at three of the eight Universities. The Open University also conducts a two year Post-Graduate Diploma in Education course through the Distance Mode.

Recently the National Institute of Education also commenced a Post-Graduate Certificate in Education course equivalent to the above Diploma making use of both the Distance Mode and school based provision of training.

The practice of recruiting teachers in Sri Lanka has been to recruit at two levels, that is those with a degree from a recognised University and those possessing a G.C.E.(O/L) Certificate. The latter requirement has now been elevated to a minimum of three subjects at the G.C.E.(A/L) Examination.

In addition to initial teacher education programmes discussed above there are short term in-service continuing teacher education programmes. The responsibility for conducting such programmes is shared between the Curriculum Development Division of the National Institute of Education and the Regional Departments of Education.

The Curriculum Development Divisions organize the in-service in-service programme for teachers at Senior Secondary level while the programmes for teachers at Junior Secondary and Primary levels are handled by the Regional Departments in cooperation with the National Institute of Education.

TEACHER EDUCATION ENROLLMENTS - 1987

	NON GRADUATE TEACHERS			GRADUATE TEACHERS		
	Colleges of Education	Teachers' Colleges	Institute of Dist Education N.I.E.	Open University	Universities	Institute of Teacher Education N.I.E.
Primary	1104	1000	5180	-	-	-
Science	469	284	3825	-	-	-
Mathematics	236	301	-	-	-	-
Home Science	77	196	-	-	-	-
English	443	719	-	-	-	-
Physical Education	197	-	-	-	-	-
Special Education	-	163	-	-	-	-
Religious Education	40	315	-	-	-	-
Aesthetic Education	-	371	-	-	-	-
Technical Subjects	-	164	-	-	-	-
Post-Graduate Dip. in Ed.	-	-	-	2300	240	-
Post-Grad. Cert. in Ed.	-	-	-	-	-	525

Source: Ministry of Education , University Depts. and National Institute of Education

□ (4) □

4

History of Teacher Education in Sri Lanka

Pre Buddhist Era:

The beginning of civilization in Sri Lanka is traced back 'to the arrival of Vijaya in 543 B.C.' Vijaya obtained "Craftsmen of thousand families of the eight guilds from India (Geiger 1950). Knowledge during this period was handed down from father to son by a system of apprenticeship (Geiger 1950). The family acted as the nucleus for the training of early teachers of the Pre Buddhist era. The kings had Brahmin teachers (Coomaraswamy 1958). These teachers had learned the time - honoured stock of knowledge by lore.

The Buddhist Tradition 543 BC

With the introduction of Buddhism in the third century B.C. the Buddhist system of education came into being. "Buddhist education sacred as well as secular was in the hands of the monks". (Mookerjee 1947). In Sri Lanka Buddhist monks took education of the nation into their own hands. "The rulers of the country as well as the commoners were trained. Those who aspired to become monks or teachers went to the monastery or pirivena" (Ruhula 1966). Therefore we can infer that monasteries served as the earliest centres of teacher training in Sri Lanka. Pupils learned through constant association with the teacher; in these monasteries. According to Mookerjee (1947) "Constant association between teacher and the taught is vital to education as conceived in the system".

Portuguese Period (1505 - 1658)

Though the Portuguese tried to establish a system of education in Sri Lanka there is no evidence to prove that they tried to establish a system of teacher education. Teachers were mostly missionaries who were trained in religious institutions of the west (Ruharu 1962).

The Dutch Period (1653 - 1796)

Among the public services of the Dutch, education took a prominent place (Ruberu 1962). The first attempt to prepare teachers was made at the Seminary in Jaffna which was established in 1690. The objective of establishing a seminary was "to train Tamil youth as catechists preachers and teachers (Mottau 1958). Another seminary was established in Colombo in 1696 (Ruberu 1962). The curriculum in these institutions included Latin, Greek and Hebrew. Some superior students were sent to universities abroad to be trained as clergymen, who later became teachers. The seminary in Jaffna was closed down in 1723. In 1747 a new Seminary referred to as a Normal School was started at the Company's Dutch School in the old city of (Pettah) but this institution too continued in existence for only a few years..

The British Period 1795 - 1948

The British period can be divided into several sub-periods

Period from 1796 - 1870

The British too took an active interest in promoting education in the Island. During the period of Governor North (1798 - 1805) the Colombo Academy was established for preparing youth for the public service. The curriculum in the academy consisted of English, Mother Tongue and subjects that were common in English Seminaries (Ruberu 1962). However, definite proposals for provision of teacher preparation were made in Maitland's time (1805 - 1811) by a committee appointed in October 1809 (Ruberu 1962). These proposals were carried out and the Colombo Academy was used to educate the future teachers. Another significant contribution to teachers education was made during Sir Robert Brownrigg's time (1812 - 1820). It was during this time that the Monitorial System of teacher training was introduced. (Ruberu 1962). This system was first practiced in England at this time Brownrigg introduced this system

some of the schools (Sugathadasa 1969). This was a system where there was one master in the school. He selected a few pupils who became pupil teachers or monitors. These pupil teachers continued to instruct the younger pupils in the school. These monitors were selected by the Master of the School and was appointed by the Director on the recommendation of the Inspector of Schools. They were paid a monthly allowance. The master had to instruct the "monitors for one hour a day. There was an examination at the end of one year. For each monitor who passed the examination the master was paid Rs.25/=. The size of the school determined the number of monitors appointed.

The monitors were expected to follow a four year course after their first examination. However few monitors appeared for their subsequent examinations as many vernacular teachers were deficient in knowledge to prepare them further. The monitor too had to spend all his time teaching and had little time to improve his knowledge (Sugathadasa 1969).

During the early years the monitorial system was successful. It helped in staffing schools but later it became evident that this scheme was not entirely satisfactory (Sugathadasa 1969). But this system remained the cheapest source of teachers until it was discontinued in 1929. This was a beginning attempt at school based teacher preparation.

During the early British period any person with a knowledge of English was thought to be satisfactory as a teacher. But the need to train became apparent and some attempts were made to set up training institutions for teachers. In 1842 a 'Normal School' providing for a three year course of study was established attached to the Colombo Academy. This course had 12 students. This course was transferred to Central School at Colombo in 1843. Later normal classes were similarly attached to the Central School at Galle and Kandy (Jayasuriya 1969).

There were nine normal students in these normal classes. These students were chosen from the best scholars in the Central Schools.

A normal school for training Sinhala and Tamil teachers were started in 1847. The curriculum consisted of religion, geography, history, arithmetic, geometry & writing (Sugathadasa 1969). In 1847 the normal class of English teachers was abandoned but the normal class for vernacular teachers training continued till 1858.

By 1858 all normal institutions of the government was closed down due to financial stringency and by this date there were no state institutions for the training of teachers.

However, parallel to the State system of teacher preparation the missionaries had established their own system of training teachers. The sources of teachers were students from Superior schools (upper secondary) and from monitorial system. They maintained a number of vernacular training schools attached to the superior schools.

The Morgan Commission (1867) recommended the establishment of Department of Instruction and also of a teacher training school.

(Ruberu 1962) As a result a Normal School was established in 1870 to overcome the deficiency of competent teachers (Sugathadasa 1969)

Period from 1870 - 1947

The Normal School provided courses in Sinhala, Tamil and English. In 1874 it became a residential institution Recruitment was on the recommendation of Heads of Schools. At this time there was a change in government policy of leaving English Education to the missionaries and in 1884 the Colombo Normal School was discontinued.

The students were attached to Anglo-Vernacular Schools in Kandy and Bentota.

The institution established in 1870 rendered a great service to the course of teacher training in the island during this period.

In 1880 grants were given for private training colleges initiated to encourage missionary effort in the establishment of teacher training institutions. In 1896, the Director of Public Instruction pin pointed the deterioration of the standard of English education in the country due to absence of proper teacher training facilities.

Classification of Training Schools in 1900

	<u>School</u>	<u>No. of Students</u>
Roman Catholic	2	12
Wesleyan	3	17
Church of England	3	11
Buddhist	-	--
American	1	09
Government	2	?
Female Schools	4	10

The deterioration of English education resulted in the opening of a new Teacher Training College in 1903. Students were admitted to three streams to suit the three type of schools, English Anglo-Vernacular and Sinhala Graduate teachers were recruited to the staff at first there were only males. The curriculum consisted of principles and practice of teaching, and academic subjects with emphasis on the former. In 1916 a training College for Tamil students were started at Kopay. In 1919 the government realizing the inadequacy of training facilities for Sinhala trained teachers, a training school was started at Henaragoda (Jayasuriya 1976).

In 1920 supply and training of teachers was placed under a separate officer of the Education Department. In 1929 the system of awards Teacher's Final Certificate was started. In connection with a rural scheme of education inaugurated in 1931 two rural training centres were started in 1934 at Mirigama and Welitara. Later a third was started at Giragama (Jayasuriya 1976).

By 1939 the following teacher training institutions were functioning (Jayasuriya 1969)

<u>Type of Training Colleges</u>	<u>Number</u>
English Training College	1
Sinhala and Tamil Training Schools	19
Rural Training Centres	02

The English Training College was a government institution and was popularly known as the Government Training College. This College prepared teachers for the English schools but had a section which prepared teachers for the Sinhala Schools.

The Sinhala and Tamil Training Schools managed by denominational bodies prepared teachers for Sinhala and Tamil Schools. Two training colleges established to prepare teachers for the rural schemes too were government institutions.

Admission to all the teacher training institutions was on the basis of written examination or interview. Admission was open to persons who had passed the London Matriculation examination or the Cambridge Senior Examination or the Senior School Certificate (Jayasuriya 1969)

In 1939 there were no facilities for professional training to university graduates.

From 1940 - 1943 there was little change except for the conversion of the training colleges established for the training of teachers for the rural scheme to ordinary training. Interest was waning in Rural Scheme of Education and in 1942 The centre at Giragam for training of teachers under the rural scheme was converted to a training college of the conventional pattern.

The Kannangara Commission (1943) recommended that "all teachers of the future should be trained", noting that a handful of the graduates employed in schools had not received any kind of professional training. It also recommended that the differences of English and Sinhala teacher should be done away with by the abolition of undesirable labels of "English and Vernacular teacher" and they suggested that all teachers should be accorded a status in accordance with the educational attainment, qualification and experience. The committee too suggested that curriculum be of four main sections.

- (1) The study of the theory of education
- (2) Study of Educational Psychology
- (3) The practice of education
- (4) General Methods and Special Subject Methods.

They also recommended the establishment of "practising schools" attached to training colleges. For the non-graduate they recommended a single type of training college and for the graduate teachers they suggested the establishment of a Department in the University that would take charge of their training. The further continuation of the grant-aid to denominational schools too was recommended. For practical subjects, they suggested the Ceylon Technical College as the proper institution. (Jayasuriya 1969).

In implementing the Kannangara Reforms on Teacher Education the course for primary and junior teacher was made for a duration of two years. During the first year academic studies in ordinary school subjects were done. Professional studies done during the second year included the Theory of Education, Development of Education in Sri Lanka, child Psychology, and general and special methods, Teaching practice was carried out in both years.

In 1947 the situation prevailed with regard to Teacher Training in Sri Lanka; non-graduates is as follows.

Period from 1947 (Post Independence Era)

No. of Students in Training Colleges 1947

	<u>Men</u>	<u>Women</u>	<u>Total</u>
Government Training Colleges	617	198	815
Assisted Training Colleges	300	462	762

Training Institutions - 1947

Government Institutions

English 1. Maharagama Training College

<u>Sinhala</u>	<u>Tamil</u>
1. Mirigama (Mixed)	1. Palalai (Men)
2. Balapitiya (Mixed)	2. Kopai (Women)
3. Giragama (Men)	3. Batticaloa (Men)
4. Polgolla (Woman)	4. " (Woman)
	4. Alutgama (Muslim Women)
	5. Addlachchanai (Muslim Men)

Assisted Training Colleges

<u>Sinhala</u>	<u>Tamil</u>
1. Musacus	1. Saiva
2. Nittambuwa	2. Ramanathan
3. Bolawalana	3. Parameshvera
4. Wennappuwa	4. Colombogam
5. Maggona	5. Illavalan
6. Peradeniya	6. Augustine

The existing teacher training institutions trained teachers for two levels.

1. Secondary School Teachers
2. Primary and junior school teachers

Secondary trained teachers were trained at Government Training College, Makragam. It was a two year course. In the first year the students devoted a greater part of their time to learn academic subjects. The second year was devoted to pedagogical work.

The primary and junior school teachers were trained in 22 training colleges out of which 10 training colleges were Sinhala Medium and 12 were Tamil Medium. (Ceylon Adm. Report 1947 Part V P A 23)

At this time there arose a need for special courses in teacher education. The Kannangara Commission suggested that the Ceylon Technical College ^{was} the proper institute to organize courses in technical subjects. A two year course in vocational training was started at the Ceylon Technical College in 1948 (Jayasuriya 1969) Another training College for Arts and Crafts was started in the same year at the government school of arts and crafts. In 1949 a training college was started to train teachers for the Kindergarton. By 1950 there was a two year course in training for teachers of agriculture at Peradeniya and Kundasale (Jayasuriya 1969) "The students to follow the two year course in agriculture and also lectures in Botany, Zoology, principles and methods of teaching." (AR 1950 - Dr.H.W.Howes)

In 1953, "The training of vocational teachers was transferred from Ceylon Technical College and the Government School of Arts and Crafts to the Government Training College at Maharagama." (A R 1953 P.A.21)

This was the beginning of specialized courses in training colleges (Sugathadasa 1969) Specialized training was centred at Maharagama from that date till it was ^{extended} to the other training colleges later. In the same year a two year course was started for the training of Science teachers. These teachers were expected to specialize in two of the three subjects Physics, Chemistry and Biology. In 1954 a course for training of Mathematics teachers was started at Maharagama.

The same year the two training colleges at Mirigama and Palaly were converted to "National Training Colleges" and were reorganized to provide a 6 month course in practical training for male trainees.

The course was organized under four headings :

1. Occupation agriculture, handicraft, Building Construction
2. Health
3. Study of the locality
4. Music dancing and art

It was "specially designed to give the teacher a training in practical subjects and methods of correlating practical work with the normal subjects of the curriculum. (Administration Report of the Director of Education P1

This experiment however lasted for a short while and they reverted to former status as primary and junior training colleges in 1957.

Extension of specialist courses at Maharagama continued with a course for Handicraft teachers (1955) English teachers (1958) Commerce (1960) and Home Science 1967. (Sugathadasa 1969)

In 1958 the principle of "full pay" training was introduced. Every student enjoyed full pay study leave.

An assisted system of teacher training institutions thrived side by side with the government institutions in Sri Lanka. This was the result of missionary effort in education. As indicated earlier the government granted aid to these training colleges. This grant-in-aid system was continued till 1960. Since the Kannangara Commission recommended that training colleges controlled by denominational bodies should continue to be assisted from public funds. By the Assisted School and Training Colleges Special Provisions Act No.5 of 1960 the assisted training colleges which were under the management of various religious denominations came under the control of the Director of Education. This paved the way for uniformity in all training colleges. "It was from this year that a common curriculum could be implemented in all training colleges as they came under the government (Gunawardena 1972).

In 1960 the curriculum of the general course consisted 12 compulsory subjects with two optionals. The curriculum, of the special training course consisted of 8 compulsory subjects one optional subject and the speciality. These curricula were changed as in stages since the National Education Commission pointed out that "the curriculum was very heavy". In 1963 the curriculum in the primary and junior teacher training colleges was changed. (Circular No.T.C.1/337 8 Oct 1963)

To obtain a pass a teacher trainee had to be successful in principles of education, Educational Psychology, Language and literature and teaching practice with a pass in two other optional subjects. This was changed again in 1967. Nine subjects were made compulsory with two optionals at the examination. However, the student had to study 5 general subjects which were not tested at the final examination (Gunawardena 1972). The curriculum was changed again in 1970. The student was expected to offer 5 compulsories one optional, one other. Educational practice was also a compulsory component and more time was allotted to it. Teaching practice was changed to school practice and more emphasis was placed on school based training.

In the 1960's the concept of teacher training too was changed to "teacher education." Circular Number TC/1/196/1963. Specifically declared that in future all teacher institutions should be known as Institutions for teacher education and not as Institutions for teacher training.

Since 1920 training of teachers was under a separate staff officer. In 1947 a separate Training College Branch was set up but till 1966 this was a part of the responsibility of a Deputy Director of Education. In 1966 the training colleges were placed under a separate Director of Education. In 1966 the training colleges were placed under a separate Director of Education at the Ministry of Education. (Sugathadasa 1969)

In 1970 a postal training course for the training of primary training teacher was started. It was of three year duration.

Period from 1972 - 1980³

In 1972 teacher education for non-graduate teachers was organized into 3 different types.

1. Two year General Course to prepare primary school teachers.
2. Two year Specialist Courses to prepare junior secondary school teacher in science, mathematics, commerce, handicraft, home science, agriculture, aesthetics, physical education, English and special education
3. Three year postal training course for primary trained teachers

Type of Teachers College	Number
General Training Colleges For primary teachers	20
Special Training Colleges (Aesthetic, Agriculture, Maths, Commerce, Handicraft, Home Science, English, Physical Education)	8
Total	28

In 1975 the distinction between general and specialist courses was removed. After this date all courses were considered equal and the disparities in salary were removed.

In 1979 more emphasis was placed on school based training and a new type of sandwich teacher training was introduced. It was known as a Alternative Fedd and Distributional Teacher Training (AFITT).

Earlier the teacher training course was of two years duration with teaching practice in between. After the new system was introduced the duration of the course was extended by another year. (Circular No. Teacher 4/77/09/12/1974).

Periods of institutional training alternated with training in the field. In the three years 6 months of field training alternated with institutional preparation. This emphasized that training in the field is more important than training at the Teachers' College. The scheme was abandoned after 2 years and the system existed earlier was reintroduced.

A circular issued in 1981, introduced a new feature whereby the trainees had to undergo one year of field training after the 2 year institutional training period. (Circular No. T/E/12/324/81).

Period after 1980 - Emergent needs and new approaches to Teacher Education.

The shortage of trained teachers and the inability of existing institutions to meet the demand was one of the major issues facing teacher education in the 1980s. There was a backlog of untrained teachers at every level.

Year	No. of Students	No. of Schools	No. of trained teachers	No. of Untrained teachers
1983	3460375	9575	76627	50353
1985	3646080	9634	82252	60362
1987	3833159	9714	79964	58428

MOE School Census - 1987 (Provisional)

The existence of a huge backlog of untrained teachers had many adverse effects on teacher morale as well as quality of teaching.

The Report of the Education Reform Committee - 1979 commenting in teacher education, noted that in Sri Lanka, 38.8% of the teacher work force was untrained, out of which 37,000 awaited institutional training. However as the table indicates there was a severe dearth of institutional accommodation for teacher training.

Untrained teachers subject-wise and vacancies
for initial training at Teachers Colleges (1980)

<u>Subject</u>	<u>No. Untrained</u>	<u>Availability of places</u>
Science & Mathematics	5806	2500
English	2275	500
Primary	30071	2500
Others	<u>2357</u>	<u>500</u>
	39309	6000
	=====	=====

(Source - Department of Statistics - Ministry of Education.)

While there was a need for expansion of opportunities for teacher education, there was also a dearth of teachers in schools which made it difficult for them to release teachers awaiting training to follow full time institutional training programmes.

Along with the rising need for quantitative expansion of training opportunities, there was also a growing concern about the quality of teacher education and the need to improve it. Referring to institutional training provided at Teachers' Colleges, The Educational Reforms Committee pointed out that "the inputs into Teachers' Colleges are massive; yet the question must be asked whether the end product is commensurate with the outlay." The committee attributed the failure of institutional training in recent years to the following factors.

1. Administrative ineptitude
2. Unrealistic curricula
3. Poor student material
4. Low-grade teacher education

The static nature of the teacher preparation institutions has contributed in a large measure to lack of quality in their end products. According to one observer, "Teacher education programmes were mainly academic in content, elitist in form and classroom focussed in structure." (Ekanayake 1983).

Another weakness in the existing system which became a focus of general attention was the apparent lack of close relations among institutions concerned with teacher education. The Educational Reform Committee draws attention to "lack of close and cordial relationship between the University faculty of education, the Curriculum Development Centre and the Teachers' Colleges in a collective national effort to make the National Education System relevant to contemporary society."

The post 1970 era saw a number of noteworthy developments, some of which took place partly in response to the needs and problems that arose during this period. The scope of training provided in the Teachers' Colleges expanded with an increase in the number of courses provided. On the other hand the number of Teachers Colleges decreased from 28 to 15 by 1988. There was also an apparent decline in the patronage provided to Teachers Colleges. Establishment of 6 Colleges of Education

to provide pre-service teacher education to those with G.C.E.(A.L.) qualifications, closing down some of the existing Teachers Colleges was another significant development. Distance Education programmes for the training of primary school teachers and teachers of mathematics and science too were started by the Ministry of Education, which later became the responsibility of the newly established National Institute of Education. Thus by 1968 there were three modalities or strategies of Teacher Education catering to the teacher education needs of primary and secondary school teachers. Teachers Colleges and Distance Education programmes catered to those in service while the Colleges of Education provided pre-service training to new teacher recruits. All three modes of teacher education were meant to provide initial training.

Short term teacher education programmes for teachers in service were also begun during this period. These were conducted mainly for curriculum orientation-for orienting teachers to curriculum changes that took place from time to time. They were not conceived for updating professional skills of teachers. In short teacher education was not organised as a continuous process and there were no systematically organised continuing teacher education programmes.

Current Teacher Education Programmes

Initial teacher education programmes available in Sri Lanka at present can be grouped into two broad categories:

- (a) Non graduate level teacher education programmes
- (b) Graduate level teacher education programmes.

Initial teacher education courses for non graduate teachers are provided by

- (a) Teachers Colleges
- (b) Colleges of Education
- (c) Institute of Distance Education -N.I.E.
- (d) Higher Institute of English Education -N.I.E.

Initial teacher education courses for graduate teachers are provided by

- (a) Faculties and Departments of Education in Universities
- (b) Institute of Teacher Education - N.I.E.

Non graduate level teacher education programmes

Teachers Colleges provide initial teacher education courses for non graduate teachers who are in service. These teachers are entitled to seek admission to any of the specialist courses available in Teachers Colleges depending on the subject areas offered at the G.C.E.(A.L) and G.C.E.(O.L) examinations. The courses of study available are, Primary Education, English, Science, Mathematics, Special Education, Social Studies, Sinhalese, Aesthetic Studies, Handicraft and Physical Education.

Colleges of Education represent a new development in the sphere of teacher education in Sri Lanka. The Ministry of Education accepted the policy of providing pre-service training to new teacher recruits before being appointed as teachers. In 1985 six of the Colleges of Education were established. Two of them were for Primary Education, one each for Science and Mathematics, English, Physical Education and Religious Education. In 1986 another College of Education was opened for Science and Mathematics, Primary Education and Home Science.

The third modality of initial teacher education available for non graduate teachers is the Distance Education Programme offered by the Institute of Distance Education of the National Institute of Education.

The Distance Education Programme offers courses in Science/Mathematics and Primary Education.

The Higher Institute of English Education of the National Institute of Education conducts a number of initial in service teacher training courses in English

Graduate level teacher education programmes

The teacher education courses for graduate teachers are provided by mainly by the universities. The Open University conducts a teacher education course for graduate teachers through the distance mode. These courses are designated Post graduate Diploma Courses in Education.

The Institute of Teacher Education of the National Institute of Education also offers an initial teacher education course for graduate teachers leading to a Post Graduate Certificate in Education. It is a correspondence course supported by regular contact sessions. The full-time study courses conducted by the faculties and Departments of Education in Universities are of one year's duration. while the part time courses are of two years duration. The courses materials are almost similar in all these courses.

In service Short time Courses

Other than these initial Teacher Education Courses, there are a number of in service short term Teacher Education courses available for function teachers which are conducted by various component Units of the NIE Namely;

- (a). The Primary Unit.
- (b). Science and Maths Unit
- (c). Education Technological Unit
- (d). Aesthetic Education Unit.
- (e). Lang. Religion and Social Studies.
- (f). Audio Visual media Unit.
- (g). NIE and
- (h). Tech. Education Unit.

practicing teachers who

The in-service education of teachers is carried out through are specially selected for the purpose and, designated in service advisers or master teachers. These advisers are trained by the Curriculum Development Division of the NIE. The in-service courses are meant for teachers working in all grade levels of the school; primary (Years 1 - 5) Secondary (Years 6 - 11) and Collegiate (Years 12 and 13).

Teacher Education Programme in
Teachers' Colleges

The present teacher education courses cater to the needs of a heterogeneous group of trainees with various abilities both in academic qualifications and teaching experience. In academic qualifications, they vary from those who possess the minimum G.C.E.(O.L.) qualifications to those with higher qualifications such as G.C.E. (A.L.), Diplomas in special subjects and General Arts/Science Qualifying certificates from Universities. In teaching experience they vary from a minimum of two years to even up to about twenty five years.

The three year teacher training programme was started in January 1981. The first two years are set apart for institutional training in a teachers' college and the third year an internship period of full time attachment to a school. The trainees sit for the final external examination at the end of two years of institutional training and before the period of internship. The results are released only after the completion of the internship.

From January 1988 the duration of the teacher training programme has been brought down to two years, without the internship. The trainees complete their training at the end of the years of two years of institutional course work.

Different Programmes Available

According to the Special Committee Report On "Curriculum Reforms in Teachers' Colleges 1980". The Teacher Education Programmes are determined as given below.

All teachers are now given "General appointments". As such their areas of specialisation at the training Colleges are based on their academic qualifications, aptitude and the needs of the teaching service.

The areas of specialisation are:-

- | | |
|------------------------|------------------------|
| 1. Aesthetic Education | 9. Mathematics |
| 2. Agriculture | 10. Science . |
| 3. Arabic | 11. Mother Tongue |
| 4. Commerce | 12. Physical Education |
| 5. English Language | 13. Primary Education |
| 6. Handicraft | 14. Religion |
| 7. Home Economics | 15. Social Studies |
| 8. Link Language | 16. Special Education |

With the introduction of the District Service Scheme for teachers a large number of Graduate teachers were appointed to schools in most of the districts and these teachers started teaching subjects like Mother Tongue, Social Studies and Commerce in the Junior and Senior Secondary classes.

Till then in most rural schools these subjects were taught by Trained Teachers . With this change those teachers who were trained in Mother Tongue, Social Studies and Commerce had to be confined to Primary classes with effect from 1985. The three programmes, namely Mother Tongue, Social Studies and Commerce were scrapped. Similarly the Link Language course too was scrapped in 1983.

Programme Objectives

The objectives of the teacher education programme of teachers colleges do not appear to have been formally and explicitly stated anywhere. A study on the objectives of teacher education in Sri Lanka refers to this drawback in the following terms;

" Most of the teacher education programmes introduced in Sri Lanka are based on arbitrary decisions. No effort has been made to identify meaningful and specific objectives. Within a period of five years (1977-1982) teacher education programme was revised on three occasions. But there is no evidence that these changes were made in accordance with any analysis of objectives".

(Karunasena L.N. 1981).

However, from a study of curricular materials and Circulars related to teachers Colleges one could deduct the following list of objectives.

- 1). To enable to teachers to understand the physical, mental, Social and emotional development of the children.
- 2). To make the teachers aware of the teaching learning process
- 3). To enable to teachers to acquire the necessary skills in selecting the appropriate learning and teaching material in the relevant field.
- 4). To help the teachers to adopt the correct methodology in the classroom.
- 5). To enable to teachers to identify the individual differences among the students and to carry out remedial measures.
- 6). To enable the teachers to effect the personality development of the students.
- 7). To enable the teachers to develop their own personality.
- 8). To make the teachers aware of the different evaluation methods and practices and their different uses.
- 9). To enable the teachers to develop inter - personal relationships among students and among students and teachers.
- 10). To help the teachers to follow a code of ethic for themselves.

(4) Teacher Personality Enlightenment at a secondary level

- I. Development of professional esteem;
- II. Proficiency in a second language;
- III. Proficiency in Strategies of Subject - Study;
- IV. Understanding resources in the School environment;
- V Understanding sociological foundations of education;
- VI. Understanding the structure of national system of education;
- VII. Developing interests in learning of subject matter;
- VIII. Understanding the school curriculum;
- IX. Training in School Teacher relations;
- X. Development of healthy attitudes in learning of subject matter;
- XI. Understanding professional rights.

(5) Facilitate Understanding the Foundation of Education.

- I. Development of Knowledge and Skills in Subject matter;
- II. Understanding current world education;
- III. Understanding Administration of the School;
- IV. Understanding School and Community;
- V. Training in Community relations;
- VI. Understanding Philosophical foundations of education;
- VII. Understanding historical foundations of education.

Curriculum

According to the Special Committee Report on "Curriculum Reforms in Teachers' colleges 1980" all trainees are expected to follow the compulsory subjects listed below.

1. Principles of Education
2. Educational Psychology and Mental Measurement.
3. Mother Tongue
4. Religion
5. Physical Yoga and Mental Health
6. General English.

The course of study for each of the special areas is subdivided into four segments or subjects, one of which is teaching methodology.

Example

<u>Specialising area</u>	<u>Subject</u>
1. Science	Chemistry/Physics/Biology/ Science Methods
2. English	Language/Literature/Functional Grammar/Methods.
3. Primary Education	Mother Tongue/Environmental Studies/Mathematical Conceptual Development/Primary Teaching Methods.

All trainees in addition are required to follow courses in at least two "minor" subjects which they are asked to select, as indicated below. The 1st minor will be a subject in their own area of specialisation which will equip them to teach at A.Level, ie. in grades 11 and 12 or in the case of English in grades 3 - 5. The second minor will be a subject out of their specialisation area and will equip them to teach in grades 6 - 8

The selection of the two 'minors' will depend on the facilities available in the respective Teachers' colleges.

Example

<u>Specialising area</u>	<u>1st minor</u>	<u>2nd minor</u>
1. Science	Chemistry/Physics Botany/Zoology	Maths/Home Science English/Art
2. English	English Language A.L. or Primary	Sinhalese/ Music/Social Studies
3. Primary Education	Mother Tongue/ Social Studies	Science/Maths/ English

In exceptional cases both "minors" may be teaching subjects in grades 6 - 8 but outside the specialising area. For those following English only one "minor" can be allowed.

The following changes in the curriculum were introduced with effect from 1982..

Course Requirements.

1.0 Professional courses

1.1 Principles of Education

1.2 Education Psychology

2.0 General Education

2.1 Compulsory	Alternative
2.11 Mother Tongue (Sinhala/Tamil)	2.14 Social Studies
2.12 Religion (Buddhism Hinduism Islam Christianity)	2.15 Mathematics 2.16 Aesthetics and Creative activities
2.13 Health and Physical Education.	

2.2 Selective Minor (A subject which does not come under
academic area to be selected)

- 2.21 English
- 2.22 Aesthetics - Art/Dancing/Music
- 2.23 Agriculture
- 2.24 Second Language (other than English)
- 2.25 Home Science
- 2.26 Mathematics
- 2.27 Science
- 2.28 Social Studies

3.0 Academic Area - 4 sections

Example

- Science 3.1 Methodology
- 3.2 Science
- 3.3 Chemistry
- 3.4 Physics

- Primary Education 3.1 Principles of Primary Education
- 3.2 Mother Tongue
- 3.3 Mathematical Conceptual Development
- 3.4 Environmental studies

4.0 Other considerations

4.1 Alternatives for selected course

4.11 For language course instead of Mother Tongue alternative to be selected in Social Studies or Mathematics.

4.12 For Religion course instead of Religion alternative to be selected in Social Studies or Mathematics.

4.13 For Health and Physical education course instead of Health and Physical Education the alternative to be selected is Social Studies or Mathematics.

4.14 For Primary course instead of mother tongue the alternative is Aesthetics and Creative arts.

4.2 Teaching Practice

During the two years of continuous institutional training two weeks to be set apart during the 2nd, 3rd, 4th and 5th terms. Sessions during the 6th term to be set apart for evaluation.

4.3 Co-curricular Activities

Co-curricular activities like sports and athletics, Societies, Special Projects, Religious programmes, Drama and music contests, Oratorical contests, Field trips, Educational tours, Community Development projects etc. are also included

in the curriculum developing on the type of courses conducted by the respective Teachers' colleges.

English Language is also taught in all the Teachers' colleges and two hours per week have been assigned for this purpose but English is not considered as a subject for the External Examination .

Mode of delivery

Each Teachers' college adopts various methods in the teaching, learning process. Methodology includes the following:-

1. Lectures
2. Discussions
3. Demonstrations
4. Projects
5. Assignments
6. Use of Audio-visual techniques
7. Micro teaching
8. Team teaching
9. Simulation
10. Field trips and educational tours
11. Guest speakers
12. Community development projects

Organizational structure and management of Programmes

Seven hours of Time Tabled work per day from Monday through Friday giving a total of 35 hours of work per week is made compulsory. The number of hours of work for each subject area is as follows:

1. Principles of Education	3
2. Educational Psychology	3
3. Physical Education & Health	2
4. Specialised area 4 x 4	16
5. Religion	1
6. Mother Tongue/Alternative	4
7. General English	2
8. Minors	4
	<u>4</u>
	<u>33</u>

One hour is set apart for the General assembly on Monday morning while the other hour is for Library work.

The total number of hours for each subject for the entire course has been allocated as follows:

1. Principles of Education	240 hours
2. Educational psychology	240 hrs.
3. Physical Education and Health	120 hrs.
4. Specialised area	960 hrs.
5. Religion	60 hrs.
6. Mother Tongue/Alternative	120 hrs.
7. General English	120 hrs.
8. Minors	240 hrs.

Out of the total number of hours per subject a certain percentage is set apart for tutorials on the nature of the subject.

The list of Teachers' Colleges and the different courses conducted by each college as at 1960 are as follows

- | | |
|----------------------|-----------------------|
| 1. Anuradhapura T.C. | 1.1 Primary Education |
| | 1.2 Science |
| | 1.3 Home Science |
| 2. Bolawalana T.C. | 2.1 Primary Education |
| | 2.2 Roman Catholicism |
| | 2.3 English |

3. Balapitiya	T.C.	3.1 Primary Education 3.2 Science 3.3 Mathematics
4. Dambadeniya	T.C.	4.1 Primary Education 4.2 Buddhism 4.3 Agriculture
5. Gampola	T.C.	5.1 Primary Education
6. Giragama	T.C.	6.1 Aesthetic Education
7. Maharagama	T.C.	7.1 Handicraft 7.2 Special Education
8. Matara	T.C.	8.1 Primary Education 8.2 Home Science
9. Unawatuna (Galle)	T.C.	9.1 Science 9.2 Mathematics
10. Peradeniya	T.C.	10.1 English
11. Aluthgama Muslim (Tamil Medium)	T.C.	11.1 Primary Education 11.2 Home Science
12. Pallaly (Tamil Medium)	T.C.	12.1 English 12.2 Science 12.3 Maths
13. Kopay (Tamil Medium)	T.C.	13.1 Primary Education 13.2 Home Science
14. Addalechchanai (Tamil Medium)	T.C.	14.1 Primary Education
15. Batticaloa (Tamil Medium)	T.C.	15.1 Primary Education 15.2 Science 15.3 Maths

16. Talawakalle T.C. 16.1 Primary Education
(Tamil Medium)

Entry Procedure to teachers colleges

The courses are open only to non-graduate teachers, Instructors of Teachers' Colleges and schools and circuit Education officers who are in service are also eligible to apply. The teachers should have at least two years of service before entering a teachers' college.

Eligibility

Every candidate should possess the following:-

- (i) A good character
- (ii) Be a citizen of Sri Lanka
- (iii) Should be less than 47 years
on January 1st of a particular year.
- (iv) Should have passed G.C.E. (O.L.)
in six subjects including Sinhala/
Tamil Language, Arithmetic/Mathematics/
Commercial Arithmetics in not more than
two sittings
(having passed in five subjects on one occasion
and pass at-least in one other subject on a subsequent
occasion) or the Senior School Certificate examination.
or
- (v) Should have passed the N.C.G.E. Examination
including First Language, and Mathematics
with at least 'C' passes or Higher passes
in six subjects.

- (vi) Those teachers who are appointed under the District Service Scheme as teachers of Science, Mathematics, English, Aesthetics, Home Science, Agriculture and Handicrafts should receive reviews in the respective subjects.

Those candidates who select the following courses of training should possess the qualifications specified below in addition to those given above.

Mathematics Course

One of the following

- (i) At least 2 credit passes at G.C.E.(O.L.) or Senior School Certificate Examination in Physics Botany, Biology, Zoology Applied Mathematics, Chemistry, Advanced Mathematics, Elementary Maths, Pure Maths and Science.
(Biology will not be considered along with Botany and Zoology).

OR

- (ii) At least two passes in the above subjects at G.C.E. (A.L.)
(iii) Either A or B passes in the two subjects Science and Mathematics at N.C.G.E.

Science Course

Same as for the Mathematics Course given above.

Agriculture Course

One of the following

- (i) Two passes at Senior School Certificate Examination or G.C.E.(O.L.) in Agriculture Chemistry, Botany, Zoology or Biology

(ii) A training in agriculture in a government farm for a period of not less than six months.

(iii) Either a A or B pass in agriculture at N.C.G.E.

Home Science Course

One of the following

(i) A credit pass in Needle work or Home Science at G.C.E. (O.L.) or Senior School Certificate Examination

OR (ii) Either an A or B pass in Home Science or Needle work which should have been taken up as pre-vocational subjects for N.C.G.E.

OR (iii) A pass in Home Science as a subject for G.C.E.(A.L.)

Handicraft Course

One of the following

(i) A credit pass in one of the subjects namely, Wood work, Metal work, Mechanical Drawing, Weaving or pottery at G.C.E. (O.L.) or Senior school certificate Examination.

OR (ii) Either an A or B pass in one of the pre-vocational subjects for N.C.G.E. namely, Wood work, Metal work or Mechanical Drawing.

OR Religion Course

One of the following

(i) Candidates applying for courses in Buddhism, Christianity (R.C.) Hinduism or Islam should have passed the relevant subject at G.C.E. (O.L.) or Senior School Certificate Examination .

- OR (ii) Either an A or B pass in the subject of religion at N.C.G.E.

Aesthetic Course

- (i) Four courses namely, Art, Music, Dancing and Western Music will be conducted under this subject.
- (ii) Even if the selection for other courses is made on the basis of seniority of the applicants those candidates applying for the Aesthetic Education Course will be selected for admission on the results of a practical test on the relevant subject.

Art Course

One of the following:

- (i) A certificate in Art from the Govt. College of Fine Arts (Three year course in Art)
- OR (ii) Teachers' Drawing Certificate
Sinhala/Tamil/English
- OR (iii) A credit pass in Art at G.C.E. (O.L.)
or Senior School Certificate Examination
- OR (iv) Either an A or B pass in Art at
N.C.G.E. Examination.

Music Course

One of the following -

- (i) Final Intermediate Certificate in Music of the Sri Lanka Gandharwa Subha or the Final Examination in Peradiga Sangeetha Examination or Jathika Natun Sangeetha Examination.
- (ii) Intermediate Certificate of the Govt. College of Music.

- OR (iii) Certificate in Music (Grade 5) of the Northern Ceylon Oriental Music Teachers' Association.
- (iv) Intermediate certificate in Music of any recognised Indian Institute in Music.
- OR (v) A credit pass in Music at G.C.E.(O.L.) or a pass in Music at G.C.E.(A.L.)
- OR (vi) Either an A or B pass in Music at N.C.G.E. Examination.

Dancing Course

One of the following

- (i) Final/Intermediate Certificate in Dancing of the Sri Lanka Gandharwa Sabha or the Final Examination or Jathika Natum Sangeetha Examination.
- OR (ii) Intermediate Certificate of the Govt. College of Dancing.
- OR (iii) Intermediate certificate of any recognised Indian Institute of Dancing.
- OR (iv) A credit pass in Dancing at G.C.E. (O.L.) or a pass in Dancing at G.C.E. (A.L. Examination.
- OR (v) Either an A or B pass in Dancing at N.C.G.E. Examination.

Western Music

One of the following

- (i) A pass in Western Music at G.C.E. (O.L.) or Grade (V) of a recognised graded examination.
- OR (ii) Either an A or B pass in Western Music at N.C.G.E. Examination.

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English Course

Candidates for the English course will be selected on the results of an Examination to be conducted by the Ministry of Education. The candidates should belong to one of the following categories:-

- (i) Teachers at present in service with 1st, 2nd or 3rd Class English Teachers' Certificate.
- (ii) Teachers appointed as English Assistant Teachers.
- (iii) Teachers who has obtained a Credit pass in English Language and/or a credit pass in English Literature at G.C.E. (O.L.) or Senior School Certificate Examination or a pass in English at a higher exam.

Arabic Course

One of the following -

- (i) A pass in stages 1 and 2 of the Al-Alim Preliminary Examination held by the Commissioner of Examinations.
- OR
- (ii) A pass in the Final Examination of the recognised Madrass Institute.

Special Education Course (Sinhala Medium)

This course is comprised of 3 fields -

- (a) The teaching of the audio handicapped (deaf)
- (b) The teaching of the visually handicapped (blind)
- (c) The teaching of the mentally handicapped

The special entry requirements are needed to apply for any one of these courses. Any candidate may apply for one of the courses with the general entry requirements.

Candidates from the Pirivena and Assisted schools for the blind, deaf and mentally retarded should have completed one year of continuous service as teachers.

Scheme of Evaluation

1. External Examinations

The external examination is conducted by the Commissioner of Examinations in the ten subject areas. A pass in this Examination is obtained by getting over 35 marks in each subject. If a trainee fails to obtain pass marks in three or less than three subjects then he is deemed to be referred and has to sit only for those subjects. If he fails in four or more subjects then he has to sit the entire examination. An aggregate of over 500 marks will qualify him to be considered for a merit pass.

2. Internal Examination

Internal Evaluation comprises 5 tests conducted during the 1, 2, 3, 4, and 5th terms as class room activities. These tests are conducted at the sametime to a common time table in all the Teachers' Colleges. The common question papers are prepared by a special examinations board consisting of Principals and senior teachers appointed by the Director of Education (Teacher Education). These tests are supported by various continuous evaluation schemes designed by the lecturers such as practical work, tutorials, projects, assignments etc. An average of 50 marks in the 5 tests is required to entitle him to a pass while an average of over 65 is required for him to qualify for consideration for a merit pass.

3. Teaching Practice

Four evaluations should be done during the 2, 3, 4 and 5th terms. An average of 50 is necessary for a pass while over 65 is necessary for consideration for a merit pass.

4. Viva, Project work and Presentations

At the termination of the internship the trainees are expected to face an interview before boards approval by the Director of Education (Teacher Education). They are graded on their

- (1) Professional achievements
- (2) Presentation of assignments, Projects
- (3) Other project work assigned like teaching aids, lesson notes etc.

Certification

The award of the trained teachers certificate is based on the trainee's achievement of the standards laid down in the four under-mentioned areas.

1. External Examination
2. Internal Examination
3. Teaching Practice
4. Viva, Project work and Presentations at the end of the one year internship period.

The final mark for each of the subjects is determined by integrating 60% of the marks obtained at the external examination with 40% of the internal evaluation marks. The final pass mark for each subject is to be 35% and the gradings are to be as follows:

75 and above	A Distinction
60 - 74	B Very good pass
50 - 59	C Credit pass
35 - 49	D Pass
00 - 34	E Fail

The pass mark for Teaching Practice and Internship Evaluation Project is 50%. The certificate is awarded only after the completion of the internship trainees who are sitting for the Final External Examination at the end of 1989 are not expected to undergo the internship.

Teachers' Colleges in Retrospect

Teachers Colleges continued to be the most important institutions providing institutional training to non-graduate teachers in service. However, with the adoption of a policy of recruiting G.C.E.(AL) qualified persons and providing them pre - service training in New Colleges of Education, it was considered that Teachers Colleges, would no longer be required, once the backlog of untrained teachers were trained. It was, therefore felt that what was required was sufficient number of Colleges of Education to meet the training needs of an annual intake of nearly 3000 new teachers recruits. This also led to a general neglect of teachers colleges.

Teachers' Colleges, had changed very little over the years. Content of professional components, nature of teaching practice, methods of training did not change substantially. Some of the changes introduced did not last long. This was true of the various efforts made to improve practice teaching, to introduce community education into the curriculum and to use new techniques of training like micro-teaching, simulation games etc. A noteworthy improvement made which has survived to date is continuous assessments of the performance of teacher trainees.

Prior to 1970's Teachers' Colleges continued to be residential institutions. Relaxation of the residential requirement during the early 1970'S is also considered to have adversely affected the quality of life and learning in the Teachers' Colleges.

Failure to follow a well planned policy based on the experience gained during the process of implementation, introduction of frequent changes in a haphazard manner without giving adequate consideration to their feasibility, making changes without fulfilling other requirements which those changes called for, lack of a consistent and clear procedure for curriculum development, and curriculum evaluation, wide educational standards of the teacher trainees although the minimum qualification for entry was G.C.E. (OL), relaxation of the residential rule resulting in low level of participation in both curricular and co- curricular activities, lack of adequate teaching learning resources, complete absence of opportunities and facilities for professional development of Teacher Educators and shortcomings in administration and management of the institutions are considered to be some of the major reasons, which account

for the decline that was evident during the last 2 decades.

However, teachers' colleges will have to continue to share the responsibility for training of non-graduate teachers in service, with the Distance Training Programme. As the report on evaluation of the distance training programme points out many teachers would prefer institutional training if given the choice and that there are just as many who prefer distance mode also because of their family responsibilities. Continuing recruitment of non-graduate teachers other than those admitted to colleges of Education for pre-service training, and the presence of a backlog of untrained non graduate Teachers estimated to be around 40,000 by the end of 1998 will continue to place a demand on Teachers' Colleges for many more years to come.

Teacher Education Programme in
Colleges of Education

Shortcomings in the existing teacher education system were pointed out by a number of Committees which looked into educational reforms during the last four or five decades. C.W.W. Kannangara 1943, J.E. Jayasooriya 1962, W.K.G. de Silva 1966, and Bogoda Premaratne 1979 have all made recommendations for quality improvement of teacher education in Sri Lanka (Wickramaratne 1985). In 1981 a policy statement had been made in the White Paper expressing the idea that a new concept of pre-service teacher education would be put into effect to overcome many problems and shortcomings that the existing system of in-service teacher education had. "The present three years course would be changed to a one year institutional course followed by a year of internship in selected schools, taking into account that the minimum qualification for recruitment to the teacher profession would be 3 passes in the University Entrance Examination. The Ministry of Education decided as a policy imperative that all the recruits to teaching profession would be given pre-service initial training in teacher Education before they are appointed to schools as teachers" (Education Proposals for reforms 1981). "To develop education the teachers quality should be developed. The professional education that a teacher obtains, should be of a level where the national goals and aspirations are achieved; those who enter the teaching service should be able to face successfully the challenge thrown at by the intelligent pupils in schools and to fulfill successfully the task of turning out the younger generation into a fruitful human resource; the expectation is to change the belief that any body could effectively carry out the job of teaching; to select a group of people to the teaching profession who have attained a high intelligence level and to give them professional education about the service that they are

going to embark upon before they take over the task of teaching (Ranil Wickramasinghe, Hon. Minister 1985)

In October 1985 five colleges of Education were established, namely -

- I. Sariputta College of Education for Religious Education.
 - II. Hapitagama College of Education for Primary Education.
 - III. Siyane College of Education for Science/ Mathematical Education.
 - IV. Pasdunrata College of Education for English Education
 - V. Mahaveli College of Education for Primary Education
 - VI. Sri Lanka College of Physical Education
- were officially established and the students were taken in for the new pre-service teacher training programme.
(Inauguration Souvenir 1985)

Objectives

The objectives of the college of education are very briefly summarized as follows:

1. To produce teachers possessing the necessary knowledge, skills, attitudes and qualities in keeping with the goals set in the field of teacher education
2. To contribute to the professional development of staff as well as the general standard of teacher education in the colleges of education through the exchange of physical and human resources available in the colleges.

3. To develop the standard of education in the schools. around the colleges of education through the development of their curriculum, teaching apparatus and the supply of a guidance service.
4. To participate in educational research with a view to understanding the problems of education.
5. To contribute to community development
(Colleges of Education Handbook 1985)

Organization and Management

The Colleges of Education are vested with the power -

- (1) to provide courses of study and training programmes leading to the award of degrees, diplomas and academic distinctions of the institute which are recognized as teaching qualifications under the National Institute of Education Act No.28 of 1985.
- (2) to hold with the concurrence and under the supervision of the Institute, examinations for the purpose of ascertaining students of the college who have reached the standard prescribed by the institute for the award of such degrees, diplomas and academic distinctions
(Colleges of Education Act No. 30, 1986)
- and (3) to conduct training courses and teaching programmes for teachers and other personnel

in the education system and award degrees, diplomas and other academic distinctions to persons who have successfully completed such courses and programmes and have passed the prescribed Examinations.

(National Institute of Education Act No.28 - 1985)

The President is in overall charge of the Colleges of Education. Directly under the president are 2 vice presidents; the vice President (Administration and Finance) and the Vice President (Academic) The president is also assisted by a Board of studies whose main function is to advise him on the maintenance of discipline. To facilitate the efficient functioning of the college of Education it is divided into two wings.

1. An Administration and finance wing
2. An academic wing

The two wings function under the guidance and supervision of the two vice Presidents. Vice President Administration has under him, Hostel warden, Lecturer Coordinator, the Registrar and the Inspector of works.

Vice President (Academic) is in charge of all academic activities and he is assisted by two Deans who coordinate the activities of the lecturers on the one hand and on the other hand the lecturer Coordinator who coordinates the activities of the Audio Visual section, the library, the Academic Record Rooms and the Recreation section of the college (College of Education Hand Book, 1985; Manual of Instructions for College of Education, 1985)

Enrolment of Students

Only those who have passed, atleast on three subjects in one sitting at the G.C.E. (Advanced Level) and who are

between the age range of 18 - 22 can seek admission to the courses in colleges of education. The married students are not entitled to apply for admission to colleges of education nor can they get married until 3 years of course period is over. The admissions are done on the basis of an interview, where special consideration is given to those who have special achievements in academic and cocurricular activities, those who have shown leadership qualities taken part on social service and community activities and those who have held positions of responsibility in their schools and community. (Manual of Instructions - 1985)

The selection procedure has been such that the students with lot of potentialities are being selected to colleges of education. Almost all these students are qualified to gain admission to the University courses. The lack of accommodation in universities has kept them out. However they are qualified to persive university education as external students.

The academic year of colleges of education is fixed from 1st October to 19th of JULY of the following year. (Hand Book for colleges of Education 1985) The Calender of the academic year is given as follows:

CALENDAR OF THE ACADEMIC YEAR OF COLLEGES OF EDUCATION

Term & Vacation	From	To	No. of Working Days
First Term	1st of October	21st of December	67
Term End Holidays	22nd of December	31 of December	-
Second Term	1st of January	8th of April	76
Term End Holidays	9th of April	20th of April	-
Third Term	21st of April	19th of July	71
Term End Holidays	20th of July	30th of September	-
Total No. of days:			214

(Manual of Instructions
for colleges of Education, 1938)

The day's Time Table given to students of colleges of education is the same for all the colleges and it stipulates work from 0500 A.M. to 10.00 P.M.

The Daily Time Table for Week Days -
from Monday to Saturday

Hours	
05.00-- 06.00	Waking up and getting ready
06.00-- 06.30	Physical Fitness exercises
06.30-- 07.00	-
07.00 - 07.30	Breakfast
07.30 - 07.45	-
07.45 - 08.00	Morning Assembly
08.00 - 09.00	1st Period (academic programme)
09.00 - 10.00	2nd period
10.00 - 10.30	Interval
10.30 - 11.30	3rd period
11.30 - 12.30	4th period
12.30 - 13.30	Lunch Interval
13.30 - 14.30	5th period
14.30 - 15.30	6th period
15.30 - 16.30	7th period
16.30 - 17.00	Interval
17.00 - 18.00	Unscheduled Activities
18.00 - 19.45	Dinner
19.45 - 20.00	-
20.00 - 22.30	Self Study
22.30	Bed Time

(Manual of Instructions for
Colleges of Education - 1985)

It is made essential that the students should be residential during the session times, the objectives being; to develop attitudes for group activity to be able to take part in systematic and specific daily activities and to give an opportunity for all the trainees to be in full participation of activities organized by the college of Education.

(manual of instructions 1985)

This has been a change from the existing system in other teachers colleges where it is not made compulsory for the students to be residential for the full period of the course.

The trainees in the colleges of education are not entitled for leave during the term times. The trainees should be in their hostels of residence on public holidays and five days, so that they could participate in activities organized by the college of education. However for very special reasons the president has the power to give leave to a student for a period not exceeding three days, on the recommendations of the Vice President academic.

(Manual of Instructions 1985)

The total work schedule in colleges of education is assumed to be planned with the objective of developing balanced personalities in trainees.

The Curriculum

The curriculum of colleges of Education consists of 4 areas -

- i. Professional Education
- ii. General Education
- iii. Academic Education
(Area of specialisation)
- iv. Unscheduled activities
(co-curricular activities)

Professional Education, Includes

- I. Psychological Foundations of Education
- II. Philosophical and Sociological
Foundation of Education
- III. Measurement and Evaluation of Education
- IV. Educational Guidance and Counselling
- V. Trends in Education
- VI. School and Community
- VII. Educational Practices

General Education Includes

- I. Mother tongue
- II. English
- III. Religion and Culture
- IV. Health and Physical Education
- V. Aesthetic Education
(Art, Music, Dancing) and
- VI. Life Skills.

Academic Education includes one of the following areas of speciali

- I. Mathematics and Science
- II. Primary Education
- III. English as a second language
- IV. Health and Physical Education
- V. Aesthetic Education
- VI. Technical Education
- VII. Home Science
- v111 Religious Education

Unscheduled activities (co-curricular activities) includes

- I. Sports and Athletics
- II. Cultural Activities
- III. Societies and Clubs
- IV. Scouting and Cadeting
- V. Self Learning

The total number of hours of work is estimated as 2800

(Staff Development Document - Developing curricula for colleges of Education 1985; Manual of Instructions for Colleges of Education, 1985)

A novel feature in the proposed courses is what is given as "Educational Practices" " The general tendency in delivering, most of these materials in the Foundation Courses in Education is to present them in the forms of abstract theories, and the student is expected to apply these theories in concrete educational situations. But the leap from abstract theory to concrete application becomes more difficult when the time lapse between the acquisition of theoretical knowledge

and its application in concrete situation is wider. Therefore the need for opportunity for regular and continuous practice has to be recognized "Educational Practices" is an attempt to meet this need".

(Staff Development Document Developing Curricula for Colleges of Education, 1985.)

It is intended that, for each of the instructional courses, a "Folder" or a "Course Manual" containing the basic materials required for its successful delivery be provided to the teacher educators. The general format for course manual is as follows:

- I. Introduction to the Course
- II. Course objectives
- III. Course content or syllabus
- IV. Teaching Strategies to be employed
- V. Course requirements
- VI. Scheme of Evaluation and
- VII. References and supplementary reading materials.

The strategies or techniques of teaching adopted in colleges of education are lectures, Group discussions, Seminars, Debates, Team teaching, Role playing, Simulation, observation, Experimenting, Discovery Methods and Diagnostic method (Staff Development Documents 1985) It is an effective feature that the lecture method has been very much discouraged as a method of teaching atleast in some colleges of education, while group activity, discussion, project work and discovery : methods are encouraged (Amaragasekera 1987; Senadheera 1987)

Evaluation Procedure

A combination of formative and summative evaluation procedures are being followed by the colleges of education in the assessment of student progress and finally for the purpose of certification. The system of continuous evaluation which is in force for total period of the course, is being effected by means of

- Projects/assignments,
- Interviews
- Unit Tests
- Observations and
- Periodical Examinations

The areas which are subject to evaluation are as follows:

- I. Subjects in Professional education
- II. Subjects in General education
- III. Subject areas in Special education
- IV. School Practices
- V. Co-curricular activities
- VI. Personality and
- VII. Integrated Project

(Board Paper No.1 1987)

The continuous evaluation scheme for the first two years of the course is carried out by the academic staff under the supervision of the Internal Evaluation Committee which consists of

- I. The president of the College of Education
- II. Vice President (Academic)
- III. Deans and
- IV) Two Senior Lecturers of the college.

(Board Paper No.1 1988)

The external evaluation of trainees, which is effected by means of a written examination is organized by the Inter - College Evaluation Board, consisting of

- I. Chief Commissioner of Colleges of Education
- II. Two representative of the internal evaluation Committee of each College of education
- III. All Presidents of Colleges
- IV. Commissioner of Examinations
- and V. the Director, of Institute of Teacher Education of the NIE.

only the Professional Subject area and special subject area are subject to external evaluation by the Inter-College Evaluation Board and the examination is conducted by the department of Examinations on behalf of the National Institute of Education, which is authorized agency for holding examinations and awarding certificates. The weightage between the internal and external evaluation is to be of 50 : 50. basis.

The criterion for evaluation, weightage given for different areas and how the external and internal marks are added for the final evaluation are explained in the following table.

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Allocation of marks for internal and external evaluation

Component of Evaluation	Weightage	Internal marks	External marks
1. Professional Education	05	500	1000
2. General Education	02	200	-
3. Special Education	05	500	1000
4. Educational Practice	04	400	
5. Co-Curricular Activities	02	200	
6. Personality	01	100	
7. Project	01	100	
TOTAL	20	2000	2000

(Board Paper No.01 - 1988)

Decision regarding Internal and external evaluation will be taken by the Inter-College Evaluation Board subject to the approval of the Academic Board of the NIE, which normally directs the Inter College Evaluation Board with regard to the schemes of internal and external assessments leading to the award of certificates.

The scheme of evaluation in colleges of education is a new feature which was introduced to the teacher education in the institutional system. The scheme of continuous evaluation was first introduced into teacher education in Sri Lanka in the case of Distance Teacher Education. The first batch of teachers who followed the three year course of distance education passed out in 1987 having successfully completed the internal and external evaluation, procedures employed by distance education. The system of continuous evaluation has had its expected

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effects, in the way of motivating the trainees to achieve required standards in gradings, successfully complete the required amount of course work, and also obtain necessary feed back, and follow up work. The lecturers and the administrators too have benefitted by the continuous evaluation system in that they have been able to carry out a better job of work and in the long run it has brought about an overall quality development of the Teacher Education Course. The results of the internal and external evaluations carried out so far stand proof of success of the scheme.

Internship Period

At the end of the two year institutional teacher Education Course within the colleges, the teacher trainees have to undergo a period of internship before certification. The internship is one year full time attachment to a given school under the direct supervision of the Principal of the school and a competent teacher from the same school (Scheme of Assessment of Internship 1987).

Putting into practice the theoretical principles learned whilst in the institution, making the trainee enable to get first hand experience in understanding the child for the purpose of facilitating learning to him, getting first hand experience in using teaching aids and other resources in the classrooms, gaining experience in constructing and administering appropriate attainment tests, give an opportunity to the trained to organize and implement programmes of co-curricular activities in the school, gaining experience in classroom management and organization of the school, and gaining experience in promoting and developing good school community relations are some of the objectives of the internship training in the third year of the training course. (Scheme of Assessment of Internship - 1987)

The trainees are posted to schools within a radius of 30 miles from the college of education.

During the internship period the trainees are expected to fit into the routines of the school to which trainees are assigned and develop positive working relationships with Principal, Senior proficient teacher/other teachers on the staff, embark on a case study of the school, participate in the schools teaching programme for not less than 20 periods per week and assist school in the co-curricular activities. (Programme for Internship Training, Pasdunrata college of Education, 1987)

Making the Internship training given in the third year of the Teacher Education programme in colleges of education as a compulsory component is an effective change from the traditional system of Teacher Education. The Practice in the existing teachers colleges is to appoint the trainees to schools for full time teaching service, after the external examination which is held at the end of the two year period of course work. The existing teachers colleges however provide a Inservice Teacher Education courses while what is given at colleges of Education is a pre-service training course and the internship training provides the pre service trainees with the necessary skill development in teacher education. The success of the internship training greatly depends on one hand on the nature of guidance given to the intern by the Principal and the competent Senior teacher of the school, and the lecturer of the college of Education who supervises the intern's work during the internship periods and the level of organization and management of the school by the Principal and his staff on the other. The efficient and effective engagement of the trainee in the activities of the school depends on the latter condition.

The colleges of Education were given the authority to develop their own detail plan of the Internship training based on the main guidelines provided in the NIE.

The President and his staff, the Principal of the schools to which the trainees are posted and the senior competent teachers selected from each of the above schools are the personnel directly involved in organization and implementation of the Internship training scheme of each college of Education.

The assessment of the performance of trainees during the period of their internship, is conducted on lines suggested by the Inter College Evaluation Board according to which the trainees are assessed on a five point scale and the minimum grade required for a pass is a 'C' (Scheme of Assessment of Internship, 1987)

In the schools that the trainees are posted to, they are expected to work as permanent teachers of the staff, though these trainees are not enjoying some of the rights and privileges enjoyed by the regular staff.

The trainees in addition to the teacher programme are expected to carry out 3 projects in their schools related to educational practices. (Programme for Internship Training - Mahaweli College of Education 1987.)

The interns posted to schools are assessed under 4 categories.

1. General behaviour and the routine behaviour of the trainee within the class room and outside the classroom, but within the school, along with his personality characteristics are assessed under a five point scale by the principal of the school to which the trainees are posted.

2. The second category of assessment is done by the competent senior teacher in the school and the lecturer in the college of Education, under whose supervision the trainees are working during the internship period. He is assessed in

- I. Preparation of lesson S.T.20 marks
- II. carrying out instruction (teaching) - 60 marks
- III. classroom management - 10 marks
- IV. Teacher Personality - 10 marks

3. Thirdly the trainee is assessed on a five point rating scale, by a board consisting of the Principal, the senior teacher and the teacher. He is assessed on the general personality characteristics, his association with others in the school, professional attitudes, community focussed attitudes and on his overall performance.

4. The fourth category of assessment is done on the 3 projects that the trainee is expected to carry out during his internship period in the school. The assessment is done either by the lecturer or the senior teacher in the school and the marks are given out of 100.

All four categories of assessment are taken into consideration for completing the final score/grade for the internship training period.

(Programme for Internship Training - Mahaweli College of Education, 1987.)

Due to shortage of staff the College of Education for English Language teaching, at Kalutara gets the assistance of English Language Teaching expertise available in various educational regions of the Island for effective supervision and monitoring the Internship Training Programme for Teacher Trainees of English. College of Education, Regional Directors of Education, Principals and Senior Teachers of schools to which the interns are posted and the professional English Language Teaching staff available at the regional level, work in planned partnership in the programme. The trainees are accommodated in schools in 7 Educational regions. The Senior English Teacher of the school is in charge of the two interns posted to the particular school. The principal is responsible for overall supervision of the interns at school level. Ten interns are placed under the supervision and guidance of one Field Supervisor selected from the Regional Professional English Language Teaching Field staff (Scheme of Assessment of Internship Training - 1987).

Certification

The certificate to be issued to the trainees who have successfully completed both internal and external evaluation along with the internship requirements, is a "Diploma in Teaching" granted on three levels.

CERTIFICATION REQUIREMENTS

Grade of Certificate	Requirements to be satisfied				
	Overall Average	Minimum Grade Requirement to be obtained			
		Professional Area	Special Area	Educational Practice	Internsh: Assessmer
Distinction Pass	75% or above	75%	75%	75%	A
Merit Pass	60% to 74%	55%	55%	55%	B
Ordinary Pass	40% to 59%	35%	35%	35%	C

(Board Paper No.1 - 1988)

It is expected that the Diploma in Teaching Certificate will carry a special salary scale when they are posted to schools for teaching service. It is also expected that the scale will lie somewhere between the salary given to trained Teachers certificate and the salary given to teachers holding basic bachelors degrees.

Colleges of Education In Retrospect.

Introduction of Colleges of Education as a new strategy for the education of teachers represents a very important event in the history of teacher education in Sri Lanka. A clear policy for providing initial pre-service training to new teacher recruits has been formulated for the first time and a carefully planned scheme for the implementation of this policy has been adopted. On the one hand the beginning of this programme represents an effort to meet a long felt need to train teachers before being sent to classroom. It is also considered on the other hand to be an important step taken to improve the quality of training provided to teachers. This was attempted through a number of related measures. Minimum educational requirements for entrance to colleges were raised to G.C.E. (AL).

The curriculum in Professional general education and specializing area was revised and updated, certain subjects areas like school and community, curriculum and guidance and measurement and evaluation received enhanced recognition by being treated as separate subjects. A systematically planned programme of co-curricular activities was introduced as a means for promoting personal and social development. While compulsory residential requirement enabled student teachers to devote adequate time on co-curricular activities, the fact that they were all young and unmarried also contributed a great deal to their fuller participation in all activities of college life. Actual participation in practical teaching and other school activities have been ensured through a well organized scheme of phased supervised school practices during the institutional period and an internship of one year after the institutional period of training. Improvements in techniques of training have also been sought through the use of modern methods and technology. The other important characteristic of the programme was the scheme of comprehensive continuous evaluation of all aspects of learning and development which the programme intended to achieve. Implementation of the changes thus introduced was facilitated through the provision of required material and personal resources. Colleges were equipped with all the material and infra-structure facilities required. Efforts were made to man them with the full requirement of man power resources. For the first time, a conscious effort was made to recruit person with high academic and professional qualifications to the faculties of these institutions.

Apart from the improvements sought in the quality of teacher education imparted, Colleges of Education were also expected to contribute to the development of the standards of education in schools around the Colleges, and to participate in educational research to gain a better understanding of educational problems.

It was also thought that these colleges of education would confer enhanced status and prestige on teacher training institutions as they admit standards with higher qualifications - G.C.E. (AL), employ better qualified persons as professional staff and has been given the right to confer degrees.

During their few years of existence colleges have also attracted some criticism. All Colleges are said to follow a very heavy and arigid schedule of activities, depriving trainees of time for reflective thinking, independent self study creative work and group activities. The following observations appear to be relevant to some extent, to Colleges of Education.

" A rationale sometimes used to justify full time residential training is its potential for nurturing positive attitudes in 'hot house' atmosphere. This may be so, but the fact is that daily life in many training institutions, especially residential, non graduate ones, is stultifying and strictly regulated with regard to conduct, dress and of personal time even for mature adults. This must be detrimental to personal growth and professionalism which places emphasis on autonomy, self regulation and the exercise of informed judgement and choice ".

Linda A. Dove, 1986

It is also being argued that the emergence of colleges of Education contributed to the decline of Teachers' Colleges. Some of the Teachers Colleges were closed down and their premises taken for opening Colleges. During the past few years, Colleges are said to have enjoyed a disproportionately large share of allocation for teacher education at the expense of other programmes of teacher education.

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Distance Teacher Education Programme :

Distance education has been gaining in significance all around the world. Its evolution in print form spans a century; in radio form half a century; in video form thirty years; in multi-media form about fifteen years; and in its most recent satellite-based form five years. (Karunaratne 1985)

"One can generally observe distance education being offered for different target groups. First as a complimentary model to formal education, second as an alternative model of education at various levels viz; primary and secondary, third as a training model for teachers working at primary and secondary levels and fourth for the general public taking the form of functional courses intended to provide basic skills for better living (UNESCO/APEID 1984)

In Sri Lanka it is the third of distance education that has been in practice at the Distance Education Branch, earlier under the Ministry of Education and at the moment under NIE.

Historical background.

Distance Education facilities in a formal manner were extended to the adult clientele in Sri Lanka in 1980 in the form of the open University. However in 1979 certain measures were taken by the Ministry of Education to introduce techniques of distance education to supplement and overcome some of the existing weaknesses particularly in the areas of school administration and teacher training (UNESCO/APEID) 1984).

Out of 156,000 teachers engaged in the school system about 35,000 were yet to receive professional education. As the school system demands the recruitment of new teachers annually, the number of teachers requiring a professional education is ever increasing, but the resources and training capacities of the traditional teachers colleges were unable to expedite teacher education and an alternative system was needed. In the institutional scheme the per capita expenditure per trainee was about Rs.800/- and in contrast the per capita expenditure per distance trainee was around Rs.2,000/- in 1985; with increasing numbers in student population, this amount would further decrease. The experience has been that the untrained G.C.E. O/L and A/L (General Certificate of Education Ordinary Level and Advanced Level) qualified teachers as adult learners prefer home study courses which tend to be less cumbersome (Jayasekera et al 1985).

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The Distance Education courses for Tr. Ed. were reorganized under the newly set up D.E. Branch within the curriculum development and teacher education programme of the M.O.E. almost simultaneously as the APEID launched a programme of support to Dist. Systems and structures in 1980 (S.L. Status Report 1986).

The first batch of students to follow the in-service initial teacher education courses through Distance Education was recruited during the latter part of 1983, although the preliminary work had been commenced somewhere in 1981 (Jayasekera and Dharmadasa 1983)

Two courses of teacher education namely, Elementary Tr. Education course and Science / Maths Tr. Ed. course which are of 3 years duration thus commenced for OL/AL teacher recruits for providing them with professional training.

Distance Education Branch of the Ministry of Education was brought under the National Institute of Education in 1987 and is now known as the Institute of Distance Education (IDE).

Programme Objectives

1. Clearing the backlog of untrained non graduate teachers in inservice by providing them with professional training through Distance Mode.
2. Professional preparation of teachers, who are individually able to teach both Maths and Science at the junior or secondary school levels.
3. Meeting the requirements of teacher needs of the current integrated primary school curriculum.

- 4 . Planning, designing and implementing courses in continuing education for teachers in service.
- 5 . Making provision for developing in student teachers, the competencies which are necessary to be developed in effective and successful teachers, such as -
 - demonstrating knowledge of subject matter, included in the curriculum of schools in Sri Lanka.
 - Making use of relevant educational theories for the purpose of teaching.
 - Demonstrating knowledge of physical, social, emotional and intellectual development of the child.
 - Use of relevant teaching materials for teaching/ learning activities.
 - Maintaining effective interpersonal relations with the school community.
 - Using relevant and effective strategies in the provision of learning experiences.
 - Maintaining effective school community relations.
 - Behaving in such a manner that the dignity and honour of the teaching profession are maintained.
 - Identifying the nature and needs of learners for organizing teaching/ learning experiences.
 - Adopting an appropriate set of ethics, and playing teachers' role in accordance with the requirements of the national educational system.
 - Constructing, developing and using instruments of measurement, for purposes of evaluation, of student progress and
 - Using effective and efficient management procedures for organizing learning activities in a healthy environment.

Curriculum

Distance Teacher Education Curriculum comprises of 3 major components.

1. Common Subject Component.
2. Specialising area (Either Elementary Education or Science - Maths).
3. Practical Teaching.

Common Subject Component;

1. Professional education component consisting of;
 - a). Principles of Education
 - b). Educational Psychology
 - c). Curriculum Development,
 - d). School Management
 - e). Measurement and Evaluation and
 - f). Community Education.
2. General Education component consisting of
 - a. Health and Physical Education
 - b. Religions
 - c. Mother Tongue (Concepts)

Specialising Area

Elementary Education course

- Mother tongue.
- Mathematical concepts)
- Environment Studies.
- Aesthetics and creativity.

Science Maths Course

- Mathematics.
- Science.

Practical Teaching

Practical teaching component consists of ;

1. Practice in teaching skills during contact session using techniques such as micro-teaching.
2. Teaching in the schools under the supervision of the tutor for a specified number of periods within the duration of the course.

Organization and Management

The basic organizational structure can be considered at 3 levels.

- A The central unit
- B The Regional centres.
- C The linkage between Distance Programme and schools.

The Central Unit

The Central Unit in the Institute of Distance Education (I.D.E.) located at N.I.E Maharagama. There are five sub-divisions;

1. Course Production and Development.
2. Student Management and Administration.
3. Study support services.
4. Research and Evaluation.
5. Staff Development.

The Course Production and Development, Division handles the writing of course materials through a team of course writers, some of whom are part-time.

Student Management and Administration Division is in charge of monitoring the progress of the students and up data student records. The distribution of learning material is also in charge of this section.

The organization of programmes of study and supervision of regional centres are in charge of study Support Services divisions

Research and Evaluation Division in charge of conducting research in to the effectiveness of teaching material, the needs of the students availability of future clientele . This Section also monitors the progress of teachers in class-room teaching and also about 10% of the assignments marked by the tutors.

Development of staff is the responsibility of Staff Development division and regular workshops are held for course writers, administration and technical staff.

Regional study Centres.

The student support services is built around 30 centres. These centres provide guidance and counselling to the student teachers. They also provide opportunities for the student teachers to interact with other learners and engage in practical activity. Face to face sessions consist of one day study circles , two - day practical sessions and five day contact sessions. Practical sessions are for dancing music art and science practicals.

Staff at Central Unit

The I D E is manned by a Director assisted by Chief Project Officer S , Project Officers and Assistant project Officers (Source: IDE NIE) There are 5 Chief Project Officers and 30 Project Officers. The current position is that the Production and Development section is well staffed but the other three sections are all operating with less than 50% of staff allocated. The Research and Evaluation and study Support Services Sections are particularly badly off (Training Teachers Through Distance Education 1983).

Staff at Regional Centres

Regional Centres are in charge of a Senior Tutor who is appointed by the Director I. D.E. The Senior tutor is assisted by a team of tutors both full-time and part-time. There are approximately 200 part-time Tutors in various specialities (Training Teachers Through Distance Education 1983)

on
Commenting on the Staff the Evaluation report / Distance Education comments that many comments were positive . However, they point out " Despite these ratings however, there were rather many negative comments pertaining to the tutors in the open- ended questions. Some of the tutors were not experienced enough to guide teachers, were not sure of the modules, did not pay enough attention to weak students and sometimes behaved on an authoritarian way towards trainees " (Training Teachers Through Distance Education 1988) There was also a suggestion to improve the number of full-time tutors to enable the students to be better supervised at school practice.

Entry Requirements for Courses:

A person is entitled to apply for entry to one course only, Elementary or Science/Maths. During the first few years the admissions were considered on the basis of seniority of service of the students. The graduate teachers who draw the graduate teacher scale of salary, those who are already following courses in Teacher Education and those who have already obtained the Trained Teachers Certificate are not admitted for those courses. (Those who successfully complete the requirements of the course are placed on the scale of salary of Trained Teachers, with effective from the date of their examination . Every applicant must furnish satisfactory proof that he or she is (i) morally sound; (ii) is a citizen of Sri Lanka, (iii). is under 50 years of age on the closing date of applications (iv) has passed S.S.C., or English and Mathematics/Arithmetic/Commercial Arithmetic in not more than two sittings and (v). holds an approved appointment as a teacher in a government or approved school. Those who seek admission to Sc/Maths Course should have I a pass in Elementary Maths/Pure Maths Applied Maths, Advanced Maths and two passes in Biology, Chemistry Physics, Botany or Zoology at the G.C.E. (O/L), S.S.C. or II. should have a pass in Biology / Chemistry/Physics /Botany/ or Zoology and two passes in Elementary Mathematics/Pure Maths/Applied Maths/ or Advanced Maths at the G.C.E. (OL), S.S.C., or H.N.C.E. or III. three passes in the G.C.E. (AL) in science and / or Mathematics obtained at one sitting.

(Handbook to Students, 1983, Jayasekera & Dharmadasa 1985a)

The courses are of three years duration. However, the period of study could be extended to five years at the discretion of the student.

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Methodology

The distance mode of learning is adopted. Methodology here implies the learning material provided, practical experience, and contact sessions.

Printed Material (Modules)

Modules are developed by a team of trained course writers who write the materials under the supervision of a full-time tutor attached to the Central Unit. The module is the most important and basic lesson material used for the study courses, programmed through distance education. The module is prepared based on the sequence of learning phases and re-instructional events as developed in the information Processing Theory of learning by R.M. Gagne: (Jayasekera et al 1985)

The numbers and type of module making up the elementary and science Mathematics courses are listed below;

<u>Elementary Course</u>	<u>Modules</u>
Professional Education	21
Health and Physical Education	10
Religion	10
Sinhala/Tamil	20
Mathematical Concepts	19
Environmental Studies	19
Aesthetic & Creative Arts	<u>6</u>
Total	<u>125</u> =====

<u>Science / Mathematics Course</u>	<u>Modules</u>
Professional Education	21
Health and Physical Education	10
Religion	10
Mathematics	35
Science	37
Sinhala/ Tamil	<u>9</u>
Total	<u>122</u> ====

The module is " self - instruction" material . Each module contains assignments, self-check tests and post- test checks.

" The volume of course material was judged to be too much" however, " explanations of new material were deemed adequate by trainees on the elementary course but less than adequate by those on the science/Mathematics course " (Training Teachers Through Distance Education 1988)

Difficulties were reported on obtaining certain modules on time.

Contact Sessions

Besides the self instructional material opportunities for face to face contact between students and tutors is provided at the regional centres. Three different kind of face to face sessions are organized by the centres.

- (a) One day Study circles - About six per years are organized to help student with problems.
- (b). Two- day Practical sessions A total of eight per course is held for science practicals, physical education and dancing.
- (c). Five day Contact Session A total of eight is held for total teacher personality development.

The contact session are much appreciated by the trainees is apparent from the table below;

Course	Useful	Somewhat useful	Not Useful	Total
Elementary	86	11	0	100
Science/Maths	70	27	3	100

Training Teacher Through Distance Education (1988)

It is also apparent from the table that contact sessions were judged less useful by the science/ Mathematics students. This was because practical facilities are not available in the centres.

Teaching Practice

The Distance Programme also makes provision for supervised teaching practice. The tutors are expected to visit each trainee once per term to observe the trainee teaching, offer guidance and discuss the progress of the trainee with senior members of the staff.

The Evaluation carried out state that due to shortage of tutors " Some trainees reported only one visit from a tutor on the three years before the examination" (Training Teachers Through Distance Education 1983) This is not surprising since there are an average of 64 trainees for every full- time tutor.

Methods of Assessment

Assessment takes place at three levels.

- A. Student self tests
- B. Continuous Assessment through assignments
- C. Tests and Examination.

These are short tests designed for self evaluation . The trainees regards them as valuable aspect of the learning Material (Dharmadasa Jayasekera 1985)

Continuous assessment is organised through Assignments which are included in each Module (Dharmadasa and Jayasekera 1985) These are submitted to the regional centre for grading usually an average of form assignments have to be completed . The assignment grade account for one -third of the work awarded for the subject.

The trainee must sit for a Final Examination which is conducted in two parts. Trainees who complete eighteen months of study after enrolling and have studied a minimum of 75% of the scheduled number of modules are eligible to sit for Part I. Similarly those who complete the remaining segment of 18 months and the remaining 75% of assignment can sit the Final part II of the Examination (Students Handbook 1983).

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Final Evaluation - Part I

Part I examination of final evaluation will consist of five subjects in each course. Students will be required to present themselves for a written test in each of these subjects. Please see Table 1 below.

Table 1

Course Component	Course in Primary education subjects for Part I.	Mode of testing	Course in H/nc. Subjects for Part I	Mode of testing
Professional Education	1. Professional Education - I.	Written	1. Prof. education I.	Written
General Education	2. Religion	Written	2. Religion	Written
	3. Mother tongue	Written	3. Mother tongue	Written
Academic Education	4. Language concepts	Written	4. Maths - I	Written
	5. Environmental Studies		5. Science - I	Written

Final Evaluation- Part II

Part II examination of final evaluation will consist of six subjects in each course. Students will be required to present themselves for written and/or practical tests in each of these subjects. Please see Table 2 below.

Table 2

Course component	Course in Primary education subjects for Part II.	Mode of testing	Course in H/Sc. subjects for Part II.	Mode of testing
Prof. education.	1. Prof. education II	Written	1. Prof. Education II.	Written
	2. Educational practices	Practical	2. Educ. Practices	Practical
General Education	3. Aesthetic education.	Practical	3. Aesthetic Education	Practical
	4. Health & P.E.	Written & practical	4. Health & P.E.	Written & Practical

Course component	Course in Primary education subjects for Part II.	Mode of testing	Course in H/nc. subjects for Part II.	Mode of testing
Academic education	5. Mathematical concepts.	Written	5. Maths - II	Written
	6. Creative and Aesthetic activities	Written & practical	6. Science - II	Written & practical

Criteria for awarding passes

The final mark obtained by any candidate for a particular subject will consist of the marks he/she obtains at the written, practical (if there is any) and the continuous assessment. Subjects which are continuously assessed, and having both components of written and practical will be given equal weightage in their evaluation. Subjects having continuous and written components will be evaluated in the ratio of 1:2 respectively.

The following table illustrates the scheme of evaluation.

Table 3

Examination	Subjects	Maximum mark obtained			Maximum total obtainable	Final Mark
		Continuous	Written	Practical		
Part I	Prof. Education I	100	200	-	300	100
	Religion	100	200	-	300	100
	Mother tongue	100	200	-	300	100
	Lang. concepts	100	200	-	300	100
	Maths I	100	200	-	300	100
	Science I	100	200	-	300	100

Examination	Subjects	Maximum mark obtained			Maximum total obtainable	Final mark
		Continuous	Written	Practical		
Part II	Prof. Education II	100	200	-	300	100
	Educ. Practices	-	-	100	100	100
	Aesthetic Edu.	-	-	100	100	100
	Health & PE	100	100	100	300	100
	Maths concepts	100	200	-	300	100
	Creative & Aesthetic Act.	100	100	100	300	100
	Maths II	100	200	-	300	100
	Science II	100	100	100	300	100

The final mark obtained by a student for each subject except Educational Practice will be graded as given below -

75 - 100 = D (Distinction pass)

55 - 74 = C (Credit pass)

35 - 54 = S (Ordinary pass)

0 - 34 = F (Failure)

Marks obtained for Educational Practices will be graded as given below -

75 - 100 = Grade A

60 - 74 = Grade B

40 - 59 = Grade C

Below 40 = Grade D (Failure)

Except for Educational Practices the minimum mark required for a pass in a subject will be 35. For educational practices, it will be 40

In subjects where there is a written as well as a practical component, each candidate should necessarily obtain at least a minimum of 25 marks in the practicals, for him to be considered for a pass. Even if the final mark he/she obtains for the subject in question exceeds 35, he or she is not eligible to be considered for a pass, unless he/she has obtained at least 25% in the practicals.

A student who obtains at least 'S' grades for all the subjects of the examination, is considered as having passed the examination. A student who obtains 4 'S' grades in Part I, or 5 'S' grades in Part II, and obtains at least 25% or more for the other subject as the case may, but maintaining a minimum average of 35 or above for all the subjects of the Part is also deemed to have passed the part. This concession is not applicable to Educational Practices. If he obtains less than 25% in the subject in question he is said to have obtained a referred pass, and should complete the part at the next sitting.

If a student fails in more than one subject, he fails the entire part, and should sit the whole part at the next opportunity.

In the final certification no classes or divisions will be awarded, but the grades obtained for each subject will be recorded in the certificate.

The certificate will be effective after a period of 3 years from the date of enrolment in the course, on the 1st day of the month which comes after the date on which the final paper of Part II was held.

Distance Education in Retrospect

The distance education programme was established with the specific purpose of clearing the backlog of untrained non-graduate teachers in service as soon as possible since the Teachers colleges alone, with their limited capacity could not handle this task. By the end of 1988, science 14,473 teachers had enrolled in the Sinhala medium and 756 in the Tamil medium of these, about 7000 teachers completed their training by end of 1988. This in effect is the largest of the training programmes available for non graduate teachers.

A recent evaluation the distance education programme (Dock A.W. Duncañ W.A. and Kotalawala, E.M. 1988) has arrived at 3 broad conclusions:

1. The distance programme is functioning well and is achieving its main objective, i.e. the training of non - graduate teachers.

Internal efficiency of the programme has been found to be high with high retention and examination pass rates. The success, in the Sinhala medium programme in particular has been achieved through high levels of external and intrinsic motivation the mixture of high quality printed materials with regular face to face sessions and the decentralized organizational structure which fosters close relations between tutors and trainees. The programme has had some impact upon teaching practices. Some improvements were apparent although the distance trained teachers continue to teach mainly through the " charts and talk" methods.

2. Distance Education has become established among Sri Lankan teachers and educators as an acceptable mode of delivery for teacher training.

The programme has gained official recognition as offering a professional qualification equal in status to that offered by the Teachers Colleges . It has also gained wide acceptance among teachers., particularly those who prefer to study at

home because of their family responsibilities. In this respect it has been of special benefit to women.

3. Given the current levels of recruitment of untrained, non-graduate teachers, there will be a market for the current distance education courses in the foreseeable future.

The failure to enrol in the distance education programme the numbers estimated at the beginning, ministry policy of continuing to add to the backlog, by recruiting large number of non graduate teachers in recent years has left a large number of untrained teachers in schools. Besides Ministry has estimated that it will need to recruit a further 4000 untrained teachers every year for at least another decade. As the teachers colleges do not have the capacity to train such large number of teachers, distance programme will have to shoulder the responsibility for training a major proportion of these teachers.

The evaluation study has also revealed a number of shortcomings which emerged from this study related to practice teaching. Distance trainees are reported to have received inadequate guidance and supervision from their tutors, in practice teaching lack of necessary resources to do practical work which module study entails, particularly in science has resulted in very little practical work in the programme.

It is also pointed out that most of the participants in distance education programmes are from difficult areas with little or no facilities for self study. Although efforts have been made to make compensation for this through very comprehensive modules and contact session there appears to be a need for resource centres with improved facilities.

The Three Programmes of Teacher Education

The three programmes discussed above, namely the Colleges of Education Teachers' Colleges and Distance Education represented 3 strategies or approaches currently followed in Sri Lanka for the training of non graduate teachers. Although the number of specialist courses offered by the three programmes for the training of different categories of teachers vary, all three programmes offer specialist courses for the training of primary school teachers. Thus in general terms they seek to achieve same objective.

The programmes however show a number of significant differences. These differences are related to the nature of the clientele of each programme and the broad strategy or approach employed in conformity with the nature of the clientele. Colleges of Education admits young unmarried students with recent G.C.E. (AL) passes, and who have had no teaching experience. Teachers Colleges admit teachers in service who are comparatively older, most of whom are married, who have been recruited with the minimum qualification of G.C.E. (OL) pass, and who evidently prefer this mode of training. Distance programme also admits teachers in service, who are comparatively older, most of whom are married and who have been recruited to teaching with the minimum qualification of G.C.E. (OL) pass. Some of them chose this programme since they prefer it to others where as some chose it, as they have no other choice.

Colleges of Education are full time residential training institutions which follow a more or less uniform and a rigid schedule of curricular and co-curricular activities from 5.00 a.m. to 10.30 p.m. on working days. Methods of instruction used are direct and teacher pupil interaction are also direct and more frequent. Teachers College are institution having both residential and non residential students, following a common time table only for curricular activities which extend from 8.00 a.m. to 4.00 p.m. Methods of instruction used here too are direct. Distance programme employs the distance mode where by training is transmitted through self instructional modules, assignments and contact sessions.

Although the programmes are similar in terms of their broader components professional, academic and practical teaching. There are significant differences among them in terms of the content and the weightage of each component. These differences are intimately related to the nature of the clients who follow the 3 programmes and the general strategy employed for training them.

The concern for providing professional training to teachers before they begin teaching, need to provide alternative educational opportunities for those who fail to enter Universities, existence of a huge backlog of untrained non graduate teachers some of whom prefer an institutional training while some prefer to study from their places of living due to family responsibilities, are some of the realities which seem to place a demand for all three modes of training in the foreseeable future.

Up to now there has never been any investigation of the actual impact, these different modes of training have had on teachers knowledge as well teaching behaviour as it manifests in actual classroom situations. All programmes seek to improve trainees' knowledge of subject matter and teaching methodology related to the subjects they are expected to teach and their teaching behaviour in class room. An evaluation of the impact of these programmes on the understanding and classroom behaviour of teachers may reveal ^{how} well each programme is performing relative to the background of persons selected for training, the mode of training adapted and the minimum level professional competencies expected from the kind of teachers these programmes seek to train.

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IV. DESCRIPTION AND DESIGN OF THE STUDY

Description of the study

A. Purposes of the study

As part of a research agreement between the Office of Education Bureau of Science and Technology of the United States Agency for International Development (USAID), the Harvard Institute for International Development (HIID), and the Research Division of the National Institute of Education in Sri Lanka (NIE), a series of studies have been carried out since 1983 geared towards improving the quality of the primary educational system in Sri Lanka. As part of this effort at the end of 1987 the Research Division of the National Institute of Education in Sri Lanka, requested a proposal for a study of current approaches to train teachers at the elementary level. The study was to determine the effectiveness and the costs of the three approaches of elementary level teacher training in the country, namely, the long-standing institutional in-service teacher college, the newly created pre-service college of education, and the in-service distance education. The study looked at three dimensions of effectiveness, namely, teachers' knowledge of subject matter, teaching skills (at a conceptual as well as at a behavioral level), and teacher attitudes across three points in time including entrance, graduation and actual classroom teaching. The ultimate objective of the study was to determine whether teacher training makes a difference in student learning along with other factors that determine school effectiveness. This study considered the private and the public costs of the above mentioned teacher training programs in relation to their intended outcomes.

This study which is summative in character, attempts to provide policy makers in teacher education, with a basis to think about teacher training approaches in relation to their differential effects and costs. In Sri Lanka, a

country where a sizeable number of teachers have not had specialized teacher training and where there is a need for allocating resources to those programs that have proven most cost-effective, this study serves as a source to make informed decisions about program improvement and resource allocation.

Although the study is ultimately aimed to those in charge of making decisions at the government level (i.e., Ministry of Education), the character of the present study involved program participants (i.e., faculty, principals, and directors), program level decision makers (i.e., principals, directors), and graduates of these programs who currently have diverse roles in schools (i.e., headmasters, teachers), in the research process. In this sense, this study attempted to give participation to those involved in teacher education programs, and in the schools, in the process of understanding how these different approaches to train teachers work.

This study was undertaken at a crucial moment for the educational system in Sri Lanka. Beginning in the 1980's a series of reforms to improve the educational system have been developed by the government. These reforms have looked to impact the performance of schools by forming school clusters, improving the performance of the school principal, and in general by increasing the efficiency of the system mostly through policies directed to decentralize the system at an administrative level. In 1991 a White Paper developed by the Education Reforms Committee spoke of the concern with increasing the quality of the teacher and to raise teachers to the level required by a renewed and more efficient educational system. The White Paper spoke directly about a reform on teacher education as the means to improve the quality of the teacher.

This study rather than answering specific questions about termination, continuity or change in the existing teacher education approaches, looks to provide to those involved in the efforts for reform, a perspective about

factors associated with various degrees of effectiveness and associated costs observed in the programs thus providing a base for future decision making.

The specific questions addressed by the study were: (1) What are the characteristics of the different programs to train elementary level teachers in Sri Lanka? (2) What do the programs that have been developed under the in-service and pre-service approaches to train elementary teachers, are able to do well in their own right? (3) How effective have these programs been in imparting subject matter knowledge, skills, and attitudes to teacher trainees? (4) How is this training reflected in classroom teaching and student learning? (5) What is the effectiveness of these programs in relation to their costs?

The study was carried out between January 1988 and November 1989. The character of the study was collaborative, this implied the structuring of the study design and work situations that would make for the most effective combination of United States and Sri Lankan resources. The development of the design, instruments, training of researchers, data collection and analysis as well as report writing was done in collaboration. Since truly collaborative models of research are still rare among developed and developing countries, this study served not only to determine the effectiveness and costs of teacher education approaches, but it was also a study on how to structure and develop effective collaborative research. In addition, this study also combined research with training in research and evaluation techniques, instrument development, and data analysis. All these demands imposed on the research study complicated the project combining the usual challenges inherent in cross-cultural research with the challenges involved in collaborative research and capacity building. As part of this collaborative approach, the research team decided to use instruments that reflected the Sri Lankan situation rather than using instruments that have been developed on the basis of other

situations and contexts. As a result instruments were developed by the research team in collaboration with Sri Lankan experts, resulting in for example, composite measures to evaluate teaching skills and knowledge which on the one hand reflect (according to judgements of experts) the Sri Lankan situation but are not as susceptible to standard reliability tests commonly used in one-dimensional measures. The latter is specially true for written test on teaching skills.

The political situation and social instability of the country throughout the duration of the study contributed to the already complex study. Constant threats of civil unrest among the Tamil population located in the North and East parts of the island impeded addressing the study to Tamil teacher education programs. Constant protests against the government response to the Indian army in the North of the island, precipitated action by the radical Sinhalese group the People's Liberation Front (known as the JVP for Janatha Vimukthi Peramuna), causing social instability that affected the schools, the postal services, and the transportation services as well. In the midst of this difficult situation the study was carried out with interruptions and with low response rates in some cases. Parts of the study that had already been planned such as achievement tests to pupils of the teachers graduated from the different programs, had to be suspended indefinitely until a more stable situation allowed for the gathering of more valid and reliable results. This objective was only achieved in November 1989. In spite of these problems, the study has achieved its major goals of providing indicators of program effectiveness and costs, training and capacity building, and setting up the basis for future and continuous evaluation of teacher education programs. The study has served as well as a model for future research directed to educational policy making in the country.

B. Design of the study

Previous research studies in Sri Lanka have found that trained teachers make an important difference in school quality and that one trained teacher in a school can help others in providing quality education to students (Cummings, 1988; Navarro, 1988). The strategy of the present research therefore was to understand the main training programs for elementary level teachers and their effects on teaching and student achievement.

Different variables were measured by this study. The first series of variables were the teacher education programs themselves. The history of the development of the programs, entrance requirements, program objectives, costs and other relevant information was gathered through existing documents, and interviews with the directors and faculty of the sites studied. The second set of variables were the program outcomes, namely teacher knowledge of subject matter, teaching skills, and teacher attitudes. In the classroom this study measured teacher behavior, student learning, and the school context.

Study of the teacher education programs

Sri Lanka has several modalities of teacher education, namely in-service training, distance education, and pre-service education. Within these modalities three types of programs were selected for the study. The selection of these programs obey the following criteria: BRIDGES priorities to help improve the effectiveness of elementary education in developing countries, the representativeness of the sites to the spectrum of teacher education programs that train elementary teachers, and the access to the program (and program sites) both in terms of location but most importantly safety. The programs selected were Teachers Colleges, Colleges of Education, and Distance Education.

Interviews with the program directors, as well as with the principals in the case of the Teachers Colleges, presidents in the case of the Colleges of Education, and the director in the case of Distance Education, provided information about the characteristics of the programs. The faculty of the Teachers College and the Colleges of Education, and senior tutors of Distance Education were also interviewed. These interviews had a closed-ended format and were developed by the research team. These interviews were applied by two NIE senior researchers.

The study of the different teacher education programs was the first activity of the research team. Interviews, documents, and other printed material provided information about the program purposes, structure, and costs.

Teacher Colleges

As explained in the introductory chapters, Teachers Colleges are directed to serve a heterogeneous group of trainees both in academic qualifications and in teaching experience. The program recruits teachers with Ordinary Level Examination (OL) and Advanced Level Examination (AL) Certificates. In this three year training program, the first two years are set apart for institutional training in a Teachers College, and the third year an supervised internship period of full time attachment to a school. The trainees sit for the final external examination at the end of the two years of institutional training and before the period of internship. Recently in 1988, the program was shortened to two years therefore eliminating the internship period. Eleven teacher colleges train elementary teachers; of these, three were initially selected for the study because of the specific program's orientation in that site, and the relevance of this orientation for future policy.

The sites selected were:

- (1) Gampola Teachers College, which only specialization is primary education and emphasizes pedagogy and teacher skills for teaching students with a wide variety of characteristics.
- (2) Bolawalana Teachers College which specializes in primary education, Roman Catholicism, and English.
- (3) Aluthgama Muslim Teachers College which is Tamil medium and specializes in primary education and home science.

This last site was dropped from the study by the NIE research team because of reported disturbances in the area.

Colleges of Education

The Colleges of Education were created as a response to a call from the Ministry of Education (through a White Paper in 1981), to improve the quality of teaching and teacher education in the country. This program is congruent with the policy by the MOE that all recruits to the teaching profession should be given pre-service initial training in teacher education. The recruits to this program all hold Advanced Level Examination Certificates (AL). This training includes two years of course work and one year of supervised internship before they are appointed to schools as teachers.

These colleges at the time of the study were relatively new (the first cohort initiated studies in 1985) and the first cohort graduated in July 1988 a date that coincided with the initial stage of the study.

Two sites were selected for the study:

- (1) Hapitigama College of Education for primary school teachers.
- (2) Mahaweli College of Education for primary school teachers.

Distance Education

The main objective of the distance education program is to give professional training as expeditiously as possible to the present backlog of untrained teachers. The first cohort of students to follow the program was recruited in the latter part of 1983. The program for primary education teachers is three years duration combining individualized instruction and some supervised classroom practice, and recruits teachers with OL/AL certificates.

Two sites were selected for the study:

- (1) The distance education center at Kandy
- (2) The distance education center at Kegalle (and Matale)

Institutional costs measures were included in this part of the study.

The people interviewed in the different programs are as follows:

Institutions:	Directors	Faculty
Colleges of Education: (Hapitigama & Mahaweli)	2	7
Teachers Colleges: (Gampola & Bolawalana)	2	10
Distance Education: Maharagama	1	11

The directors of all the programs were interviewed. All the faculty of the programs teaching Mathematics and Mother Tongue were interviewed. The interviews were carried out in the program's site by a NIE senior researcher.

The effectiveness study

Definition of the research design

The design guiding the study can be described as a cross-sectional design with a control group. In this design, measures from different groups at different points in time were designed to serve as a proxy for a longitudinal design. In addition, the presence of a control group was useful in highlighting

the effects of teacher training in general. Since this study was developed under a limited time framework (one year of field work total), the possibility for a longitudinal study of the changes in teachers' abilities associated with their respective training program experiences, was impossible. Instead it is left to our colleagues in Sri Lanka to pursue a longitudinal study based on the developments that were achieved by the present study.

The design has three major phases, in all these phases the design measures different cohorts of student-teachers. Therefore the selection of the population was done based in the number of teacher candidates existing in each cohort for the first and second phases of the study. The third phase selection was based on the number of trained teachers who were teaching years 2 and 4 in those areas where civil unrest was under control in schools around the country.

The first phase or T1 represents the first measurement of teacher knowledge, skills, and attitudes as teacher candidates enter their programs. The second phase or T2 represents the measurement of teacher knowledge, skills, and attitudes, as the teacher candidates exit their program. The third phase or T3 represents the measurement of teacher knowledge, skills, and attitudes as teachers trained in the different programs are teaching in the classroom.

In addition to the basic design described above, another set of measures pertaining to teacher effectiveness were also applied. First, pupil achievement level was measured at both pre-test (before they start classes) and post-test levels. These pupils were in the same classrooms as those teachers trained in the different programs. Second, school context was also measured. The study asked principals and teachers as well as students about school facilities, professional support, adequate installations, etc. Finally the teacher was observed in the classroom and asked to answer a questionnaire about teaching practices.

A questionnaire of private costs was applied in the second phase (T2).

Description of the different phases of the research design

Teacher education-T1

The measurement of teacher knowledge, skills, and attitudes as teacher candidates enter their program, facilitated our understanding of what they bring with them to teacher education. The three different programs studied represented a "natural" scenario to determine whether previous experience in teaching before entering teacher education (the case of Teacher Colleges), no teaching experience but strong qualifications in subject matter (the case of the Colleges of Education), and learning while teaching (the case of Distance Education) make a difference in the ultimate purpose of teacher training: classroom teaching, and pupil learning. It was expected that the two groups that have already had experience in schools, (Teachers Colleges and Distance Education) would do better in tests of teaching skills, and in knowledge of the elementary education curriculum than those students who have never had experience in teaching before (College of Education). These students however, were expected to do better than their counterparts in the other training programs, in actual knowledge of subject matter and eventually in their knowledge of elementary school curriculum and teaching skills. Ninety-two Teacher Colleges candidates were studied, 100 from the College of Education, and 24 from Distance Education.

Teacher education-T2

The measurement of the teacher knowledge, skills, and attitudes as they exit their program, allowed us to contrast the ideal that each program has in terms of preparation of their graduates and the actual level of knowledge, skills, and attitudes achieved by the specific cohorts studied. In spite of the

different populations that these programs serve they pursue the same outcomes in terms of knowledge, skills, and attitudes; this is, there is a "standard" level of preparation that teachers are expected to achieve after teacher education. Under this assumption it was possible to make an across the board comparison of the outcomes levels achieved by the different graduates. Although we cannot rule out that the observed differences might have been due to the different characteristics of the population, they might also indicate the failure or success of the programs to take into account what the candidates bring (or not bring) with them to teacher education. Seventy-eight candidates from Teacher Colleges, 86 from Colleges of Education, and 73 from Distance Education were studied.

Teacher education-T3-1

The measurement of the teacher knowledge, skills, and attitudes when they are teaching in the classroom, had the purpose of allowing us to look closely at the changes that occur on the teachers once they enter the classroom. It is possible that what the teachers have learned while in teacher education is unlearned or forgotten. If the program is effective, it is possible that the knowledge that is needed while in the classroom is the one that it is still remembered by the teacher. Finally supervised practice for some of the programs should make a difference in the skills test, and attitudes of the teachers may change after they enter in contact with schools.

Teacher education-effectiveness-T3-2

In this phase the study was directed towards the measurement of pupil achievement level, school context, teacher classroom performance and teaching practices.

The object of this phase of the study was to contrast the effectiveness of teacher training programs as expected by the program itself (i.e. through knowledge, skills, and attitudes) with external measures of teacher effectiveness in the classroom as expressed by the teacher performance and mediated by the school context.

The strategy at this stage was to "work backwards" in order to determine what are the characteristics associated with higher levels of teacher performance, and student achievement including teacher training, and students background characteristics.

In a further step these dimensions were related with the measures of knowledge, skills, and attitudes collected from the teachers that have also been observed.

If teacher education is effective, the measures of achievement should be seen related to those of performance in the classroom measured through the observations. The measures taken in this study also made possible to talk about the effectiveness of teacher education in context. For example, there are difficulties inherent in schools that teachers even if they have received the most effective training cannot resolve. Therefore this study relates teacher effectiveness in the schools with the richness or poverty of the context and then looks at the difference between teacher education programs.

Although causal inferences in this study are not possible, measurements of student achievement were also included as another indication of the school context. It may be that good students make the teacher look effective and the contrary could be true for poor students.

Thirty-eight teachers were from Teacher Colleges, 36 from Colleges of Education, 43 from Distance Education, and 11 teachers were untrained in teacher education.

The design in a diagrammatic form looks as follows:

(Insert "Effectiveness of teacher training in Sri Lanka" model about here)

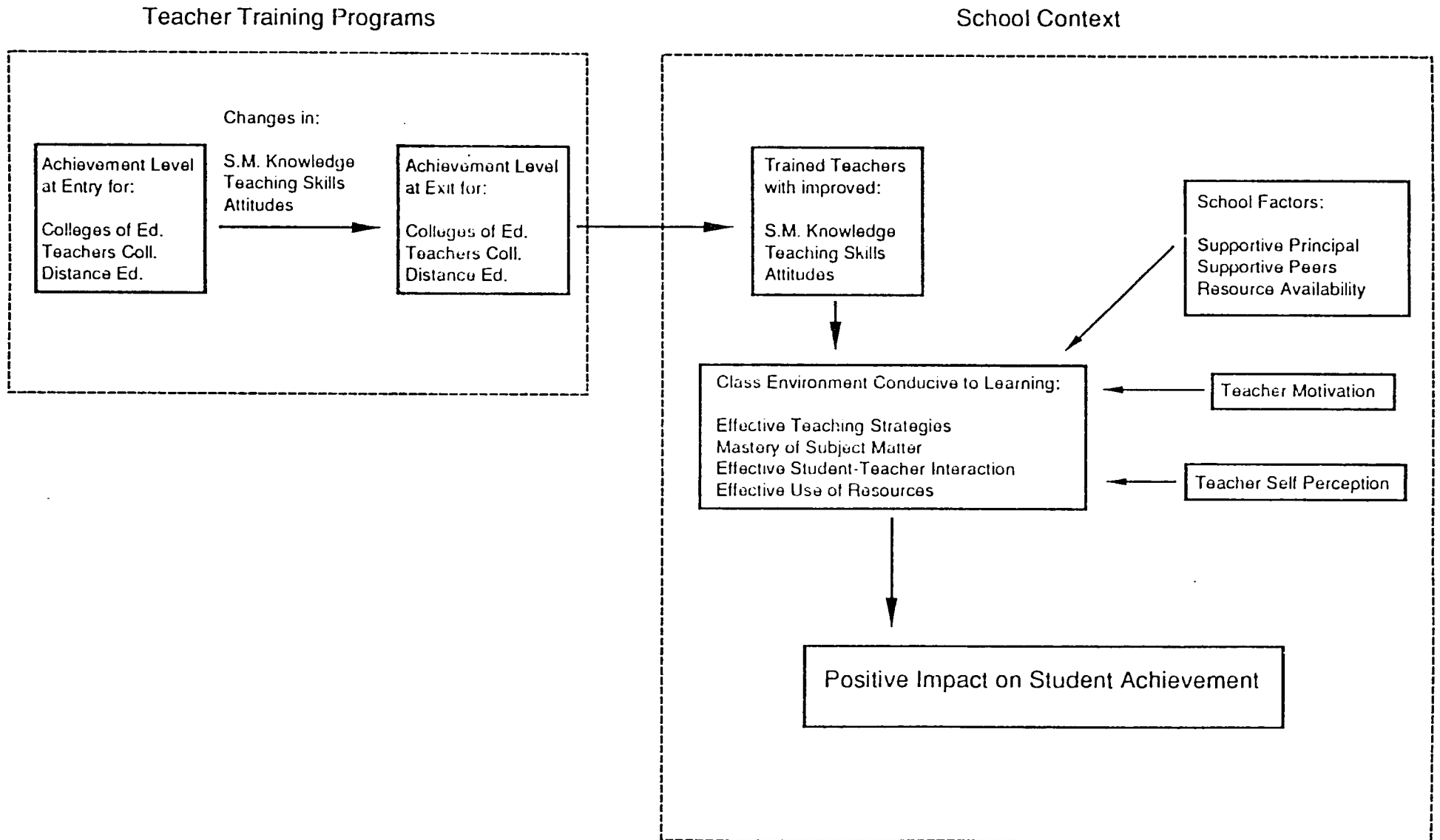
The effectiveness study focused on the teachers at the different stages in their training programs:

- (1) The first stage was the pre-enrollment or initial enrollment stage --that is, before or at the moment the teacher entered the program.
- (2) The second stage is the exit from the program.
- (3) The third stage is the post-program experience of the teachers. This part of the study identified teachers who graduated from the program one year before.

A group formed by those teachers who were not enrolled in teacher education programs but who were at a similar stage in their careers were included in the study to serve as a pseudo control group. The possibility of selectivity bias in all these groups, should be considered when interpreting the results.

A smaller number of teachers from all these four groups were selected for intensive study. These teachers were observed in the classroom and were asked to answer questionnaires about their teaching practices. In the schools where these teachers were located, the study included questionnaires for the principal (about school context), the pupils, and tests of student achievement.

Effectiveness of Teacher Training in Sri Lanka



Limitations of the Design

Although the present design is not strong enough to counteract all threats against validity, this study tried to avoid bias by collecting information from a carefully selected sample of teachers who were in the different programs, and from teachers who were not in any teacher education program at a similar stage in their careers, and from program documents. However, due to the cross-sectional character of the study our findings and our conclusions have to consider that changes observed in the individuals may be caused by factors other than to the programs themselves.

The lack of previous measures of ability for the teacher candidates was compensated by the low rates of drop out present in the different programs studied. In the colleges of education and in teacher colleges these are of less than 5 percent. For distance education the drop out rate is less than 10-15 percent.

The research design was seen as appropriate given the conditions of the study: it looked at different programs, it measured three different treatment groups, at three different points in time, and it measured a control group of teachers at the third point in time. It collected data through a series of instruments directed to measure similar dimensions from different participants (i.e., self-reports, ability measures, and observations). The effectiveness of the different programs that have the same long term objectives but different content in the same set of outcomes measures were compared. This approach provided greater external validity to the findings of the study and allowed specification of the strategies and the conditions in which different kinds of programs with the same goals, have different effects in their participants (Murphy, 1980; Weiss, 1972).

C. Outcome measures

Teacher education programs in Sri Lanka have as a main goal to impact the attitudes that teachers develop towards teaching, towards the student, towards the profession and towards the community. In interviews with program directors the topic of attitude change would always come first. Another important goal of teacher education in Sri Lanka is teaching skills. Finally knowledge of the subject matter (which is mostly circumscribed to the elementary school curriculum) is another priority of teacher education programs.

Consequently, the program outcomes that were measured in our study, are those that the programs themselves define as goals to achieve through teacher education.

Since the subject matter that teachers receive through teacher education programs is vast, the study concentrated in two of the subjects that are considered relevant for school success as well as life success, and have a high national priority in Sri Lanka, namely, Mathematics and Mother Tongue. Similarly, since it was not possible to observe all the teachers in schools and test student achievement at all levels or years, the study concentrated on those years that have special relevance in the extent of new knowledge covered and where most drop out/repetition is observed: years 2 and 4th (or its equivalent in the U.S. system: grades 1 and 3rd).

Definition of program outcomes

(1) Teacher subject matter knowledge (Mathematics and Mother tongue)

Teacher knowledge was defined as the mastery of specific subject matter as measured by selected items from teacher program's external and internal evaluations examinations for Mathematics and Mother tongue. In addition to these items, Sri Lankan experts developed additional questions to include in

the final achievement, measures. Two instruments were developed, one to measure knowledge of Mathematics, and one to measure knowledge of Mother Tongue. Both instruments measure knowledge at two levels, according to what the teacher is expected to know in order to teach elementary grades, and according to the more in depth knowledge and conceptual understanding of the subject matter the teacher is expected to master after finishing the program. These instruments were piloted and modified before the final application.

The areas measured by these tests were: comprehension, application, analysis, synthesis, and evaluation of Mathematics and Mother tongue concepts as expected and defined by the three programs.

In addition, the knowledge of the subject matter in relation to the elementary school curriculum was also measured. Specifically in Mathematics: pre-number concepts, concept of number, basic mathematical concepts, and concepts leading to secondary math. Similarly in Mother Tongue: listening, speech, reading, and writing.

(2) Teaching skills (Mathematics and Mother Tongue)

Defined as the understanding by the teacher of how children learn specific subjects, and the translation of this understanding into pedagogical skills. This test included items in the manner the teacher structures the instructional environment for an efficient teaching learning experience, the type of instruction provided, the attention to the curriculum, and the level of interaction with the students. Two tests were developed, one for Mathematics and the other for Mother Tongue. These instruments containing composite scales, were developed in their totality by Sri Lankan experts. Both tests attempted to measure the type of skills that are expected from the graduates of the three different programs.

The areas measured by these tests include: pedagogical skills such as planning instruction, implementing plans and objectives; classroom management skills such as the developing of classroom procedures, organization of the physical setting, preparation of materials, monitoring of the physical safety and mental health of the students, record maintenance, organization of learning experiences in groups; discipline aspects and attendance problems such as following disciplinary procedures, maintenance of clear parameters for students conduct, development of rapport with students, learning guidance, and continuous assessment of students and own classroom performance. These two instruments were piloted and the pertinent modifications made.

(3) Teacher attitudes

In addition to increasing knowledge of subject matter and improved teaching skills, an important objective of teacher training in Sri Lanka is attitudinal change in teachers. Attitudes were defined as the disposition that teachers have about teaching in general, and in particular about the profession, about the students, and about the community. An attitudinal scale was developed using some pre-existing questions previously applied in the Sri Lankan context. A group of experts and the research team contributed to the full development of the scale.

(4) Teacher behaviors

For observing teachers in the classroom, an already developed observation schedule (used by the BRIDGES project in Pakistan) was piloted and adapted to the Sri Lankan classroom. An additional questionnaire was included here directed to the teacher asking about specific situations to elicit the application of teaching skills.

(5) Student learning

The final test of an effective teacher is on student learning. Two achievement tests one at year 2 and one at year 4th were developed by Sri Lankan experts and piloted before the final application. Pre-tests and post-tests were applied to the children of the teachers selected to be observed in the classroom. An additional questionnaire was applied to the students asking about background characteristics and their personal evaluation of their teacher. Because of the interruptions in schools' normal activities, only the post-test for year 4th were considered valid and the results were analyzed.

(6) School context

Teacher performance depends not only on the quality of the teacher training but on the factors present in school. Some of the factors are classroom size, textbook availability, principal's support, support among teachers, communication with parents, etc. A close ended questionnaire was developed and applied to the principal of the schools where the teachers were observed.

(7) Costs

Public and private costs of the teacher education programs were measured through instruments developed for that purpose by the research team. Additional information was gathered by looking at existing documents.

(8) Teacher motivation

Psychological research has frequently pointed out to the fact that a motivated teacher may make a more effective teacher. Teacher motivation was measured at the time teachers are in the classroom. An already existing

instrument developed in the U.S. was applied to the teachers included in the study.

The pilot of these instruments took place at the end of August 1988 in two Districts: Colombo and Kandy. The application of the instruments served to work the logistics for locating teacher and teacher candidates, and also to learn to administer the instruments with a high degree of objectivity. About fifty teachers and 50 teacher candidates responded to the instruments and the results were analyzed and the instruments modified accordingly.

A pilot of the student achievement test was carried out as well in February 1989 with students in years 2 and 4.

Validity and reliability

The validity of the instruments assessed was construct validity. Construct validity of an instrument is the extent to which it is possible to assert that the instrument represents the construct it is named for. In developing the instruments for the study a group of both U.S. and Sri Lankan (about 15 people) experts were actively involved in developing the questions. These same instruments were shown to a group of experts including teachers, master teachers, and teacher education faculty (about 20 people) who concurred that in fact the instruments were measuring knowledge, skills, and attitudes. With this basis it was concluded that these instruments have construct validity.

The reliability coefficients of Cronback's alpha were as follows:

Language knowledge	.7216
Language skills	.5629
Math knowledge	.6169
Math skills	.4981
Attitude	.7591

It is important to remember that the skills test are composite measures, difficult to subject to the usual test for reliability used for standard measures.

Data collection procedures

The study of the programs began in January 1988. When the NIE research division team prepared a monograph on the history of teacher education in Sri Lanka. At the same time, NIE researchers began assembling a group of qualified researchers to participate in the study.

The effectiveness study began in June 1988 when several sites were visited and the instruments for the outcome measures were being developed.

The first visits to the programs was to the Teachers College in Kandy, and to the College of Education in Mahaweli. The Teachers College at Bolawalana was visited as well, and finally the Central Office of the Distance Education Center at the NIE. During these visits researchers asked general questions about the program's structures and standards. Different aspects on private and public costs were explored as well.

Previous information and visits to the programs served to refine the interviews for principals, directors, and principals, as well as master tutors to capture the specific characteristics of the program from the people who live day by day with these programs. This specific information included the description of program purposes, methods, standards, curriculum, and problems associated with its implementation.

The data collection was scheduled as follows:

Measurement	Teacher College	College of Education	Distance Education
Pilot	August 1988	August 1988	August 1988
T1			
Knowledge	January 1989	October 1988	September/Oct 1989
Skills	"	"	"
Attitudes	"	"	"
T2			
Knowledge	December 1988	Aug/Sept 1988	Dec 1988/Jan 1989
Skills	"	"	"
Attitudes	"	"	"
T3.1*			
Knowledge	Sept/Oct 1989	Sept/Oct 1989	Sept/Oct 1989
Skills	"	"	"
Attitudes	"	"	"
Achiev/pre	May/June 1989	May/June 1989	May/June 1989
T3.2*			
T.Observ.	Apr & Oct 1989	Apr & Oct 1989	Apr & Oct 1989
T.questio	April-June '89	April-June '89	April-June '89
S.context	April-June '89	April-June '89	April-June '89
Achiev/post	Nov/Dec 1989	Nov/Dec 1989	Nov/Dec 1989

* Untrained teachers, their pupils, and their schools were measured at these stages as well.

Characteristics of the population studied for the teacher achievement measures.

Seventy-nine percent of the population including untrained teachers were female and the rest male. With the highest concentration of males in the Colleges of Education. Untrained teachers, distance education, and teacher colleges follow in order of amount of male teachers enrolled in the program.

Most of the students in Colleges of Education (96%) have a GCE/AL the rest have either a high school certificate, or equivalent studies. Fifty-eight of the teacher colleges students have a GCE/OL or a secondary school certificate, the rest have either a GCE/AL or a high school certificate. Fifty-four percent of distance education students have a GCE/OL or a secondary school certificate, and the rest have a GCE/AL or a high school certificate. Finally untrained

teachers 21 percent has GCE/OL or secondary school certificates, 18 percent have the GCE/AL or high school certificate, and the rest 61 percent have bachelors degrees or other higher degrees. This last group was excluded from the comparisons since they have a significantly different educational background than the rest of the teachers surveyed.

At the beginning of their respective programs, the teaching experience of Teacher Colleges students ranged from 1 to 10 years, 0 for Colleges of Education, and distance education from 1 to 9 years. Untrained teachers surveyed only at the schools had from 1 to 11 years of teaching experience.

Administration of Instruments

The instruments for phases T1 and T2 were administered by two NIE senior researchers during weekends according to the schedule presented above. The teacher candidates in the case of T1, and the graduates in the case of T2, were summoned to a pre-specified site chosen by the NIE researchers for its convenience, and the instruments were applied throughout one full day. The NIE senior researchers applied the instruments under controlled and objective conditions. For example, all the respondents answered the test in the same local, and the researchers were aware of the importance of letting the respondents express their own knowledge and provide their own views on the respective measures been applied.

For the two stages of the third phase of the study, 200 researchers were recruited from a large population of faculty in teacher education programs, master teachers, and senior teachers drawn mostly from the Colombo and Kandy areas of the island.

Careful training in the instruments to be applied included teacher achievement measures of knowledge, skills, and attitudes; and teacher

effectiveness measures pupils pre-test, and post-test, pupils questionnaire, school context questionnaire, teacher questionnaire, teacher observation, and teacher motivation.

Great emphasis was placed in the training the surveyors in the teacher effectiveness measures. Specifically, the objectives and rationale behind the pre and post-test exams for pupil achievement were carefully explained, and the procedures to apply the instruments were demonstrated step by step. They were also asked to grade the exams in site.

In the case of the observation schedules for the teachers, the research team videotaped teachers from different types of schools (in Sri Lanka the schools are classified into very difficult, difficult, and affluent schools) and representing years 2 and 4th. After carefully studying the videotapes and using the observation instruments themselves to record the teacher's behaviors, the research team used these videotapes during the training sessions. The surveyors were asked to carefully observe the teacher and the lesson being taught, and record the teacher's behaviors and the intervals of time in which they occurred. They were asked to record these behaviors in forms designed for that purpose.

Finally, the researchers received careful instructions for the application of the questionnaire which included the teacher achievement measures, as well as the questionnaires applied to the teachers, the principals, and the students.

The training sessions lasted two full days and were carried out in two sites: Colombo and Kandy.

Sample design

The sample selection for this study was purposeful. The criteria for the

selection of the sites in the study was that programs be directed to training elementary school teachers, their representativeness of the whole of the teacher education programs in the island, and the political and social stability of the region where the site was located. Two sites or centers were selected representing each teacher education approach, with the knowledge that teacher education programs are highly centralized and with the assumption that the same type of curriculum and even teaching strategies are quite standard within the approaches themselves. Therefore out of nine Teacher Colleges, two were selected for study. The two Colleges of Education that teach elementary teachers were selected. Out of 30 regional centers dedicated to Distance Education, two of them were selected for study.

The selection of the student-teachers within the programs themselves, was directed at capturing all the teachers within a program in an specific cohort or time period. For example for T1 all those student teachers entering the different sites mentioned above were studied. Similarly for T2 the study selected the whole population enrolled in the respective programs. In T3 the selection process looked to achieve two purposes. One to locate as much as possible those graduates who studied in the same sites that were selected for T1 and T2 and who had taught for a year or more in the schools.

The control group in the T3 phase was selected in the schools where the teacher education graduates were teaching. This selection was based on the assumption that untrained teachers go to those schools that need them and that since they work in the same context where the trained teachers are, it is valid to express judgements about possible differences as they relate to the effects or lack of training.

The classrooms observed were those where selected trained and untrained teachers taught and limited to the years 2 and 4th. The pupils that answered

the achievement tests were selected at random if they outnumbered 30. If less than or equal to 30, then the whole of the class was taken.

The following table illustrates the number of teachers selected by programs studied under each of the three teacher education approaches in the different phases of the study.

	T1: Initiation	T2: Exit	T3: Classroom Teaching
Program Type:			

<u>Institutional In-service: Teacher Colleges</u>			
Gampola	42	38	18
Bolawalana	47	40	19

<u>Pre-service: Colleges of Education</u>			
Hapitigama	51	45	15
Mahaweli	47	41	21

<u>In site In-service: Distance Education</u>			
Kandy	11	42	22
Kegalle	09	31	21

The schools in Sri Lanka

Since 1948 when Sri Lanka gained its independence from the United Kingdom its commitment to promote universal primary education has brought about great progress in education. This progress is seen in a literacy rate close to 80 percent and a primary enrollment ratio over 85 percent. However the majority of Sri Lanka schools (about 10,000) are seen as of low quality, lacking in resources such as electricity or trained teachers and having low rates of student attendance. These schools also suffer from high drop-out and repetition rates, and rarely students in these schools are able to pursue higher education. (BRIDGES Sri Lanka, 1988, Impact of Management Reforms on Cluster Innovation, Principal Effectiveness and School Community Relations, NIE & HGSE).

Schools are classified according to four groups depending in the orientation of their programs, their resources, and their location. According to the Ministry of Education (MOE) the "Type I AB" schools -- which constitute near to 5 percent of the schools -- are recognized as the best on the island and prepare students for the advanced level exams in all subjects including science. The "Type I C" schools -- which constitute close to 15 percent of the schools -- provide advanced level education in all areas except science. Type II schools -- which constitute close to 40 percent of the schools on the island -- prepare students for the ordinary level exams; and type III schools -- which include close to 40 percent of the schools -- provide education at the elementary level. In addition to this classification, there is another by location which specifies whether the school conditions are congenial, difficult or very difficult (Ministry of Education, 1987, School Census. Provisional Report. Colombo , Sri Lanka).

Government schools comprise 95.6 and the rest are pirivenas (or monastery schools) private and estate schools. Of the government schools 40.4 percent are primary and the rest are secondary schools. The rate of repeaters in the primary cycle from year 1-5 is 9.04 percent and the drop out rates from years 2 to 5 range from 2.10, 2.5, 3.93, and 5.52 respectively. In primary schools only the number of pupils is 1 993 994 and the number of teachers is 68 801 (43 811 primary trained, 4 275 certified, and 20 015 not certified) which makes for a student teacher ratio of 1:30. In some schools, however, the student teacher ratio is 1:64 specially in the estate schools where the children of Indian Tamils attend [Sri Lanka (1982) Ministry of Education Towards Relevance... p. 45]. The schools in Sri Lanka are tailored to specific needs of its population. For example 1.43 percent are all male and 2.10 are female, and 96.47 are mixed. Similarly, 73.14 percent are schools for Sinhala students, 19.99 percent are

for Tamils and 6.87 are for Muslim students. However the medium of instruction is either Sinhala (73.93) or Tamil (26.07 percent). The primary schools have been reorganized to include years 1 through 5 and junior and senior secondary schools comprise years 6 to 8 and 9 to 10 respectively.

This study included very difficult, difficult and congenial schools. The following table shows this distribution by number of trained and untrained teachers observed in the schools. See Figures 1 through 4.

Trained and untrained teachers observed in classrooms by type of school.

Teachers trained in:	School Type		
	Congenial %	Difficult %	Very Dif. %
Colleges of Education	9	67	24
Teachers Colleges	63	29	8
Distance Education	60	38	2
Untrained Teachers	22	64	14

For purposes of analysis the very difficult and the difficult schools were considered as one category.

The districts where the schools targeted for the study were located are presented in the following table:

School Districts for T3 - Classroom Teaching *

Districts	Teachers Col.	Colleges of Ed.	Distance Ed.	Untrained
Colombo	2	--	--	--
Homagama	4	--	--	--
Gampola	7	--	--	--
Miuuwanzoda	3	--	--	--
Kalutara	1	8	--	--
Kandy	8	5	22	3
Nuwera	4	--	1	1
Galle	--	2	--	1
Matara	--	2	--	--
Kurunegala	2	2	--	--
Kuliyapitiya	--	1	--	--
Nikaweratiya	1	2	--	--
Pultalam	--	--	--	1
Polunaruwa	1	1	--	1
Bandarawela	--	3	--	--
Ratnapura	1	2	--	1
Kegalle	3	8	20	3
TOTALS	37	36	43	11

* Most of the teachers in Distance Education remain in the District where they received their training. This is not always true for Teacher Colleges or Colleges of Education.

FIGURE 1

Percentage of Teachers Trained in Colleges of Education
by School Type

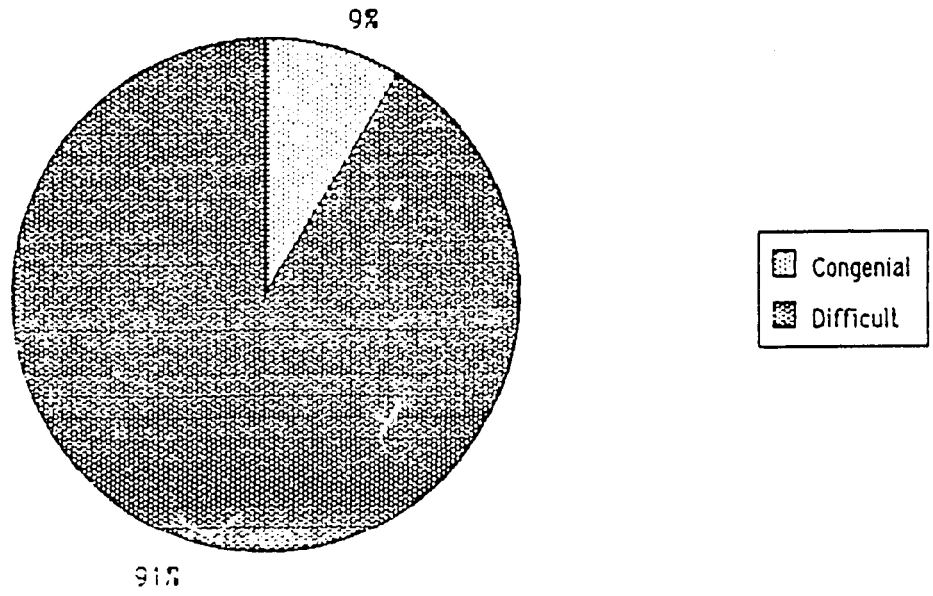


FIGURE 2

Percentage of Teachers Trained in Teachers Colleges
by School Type

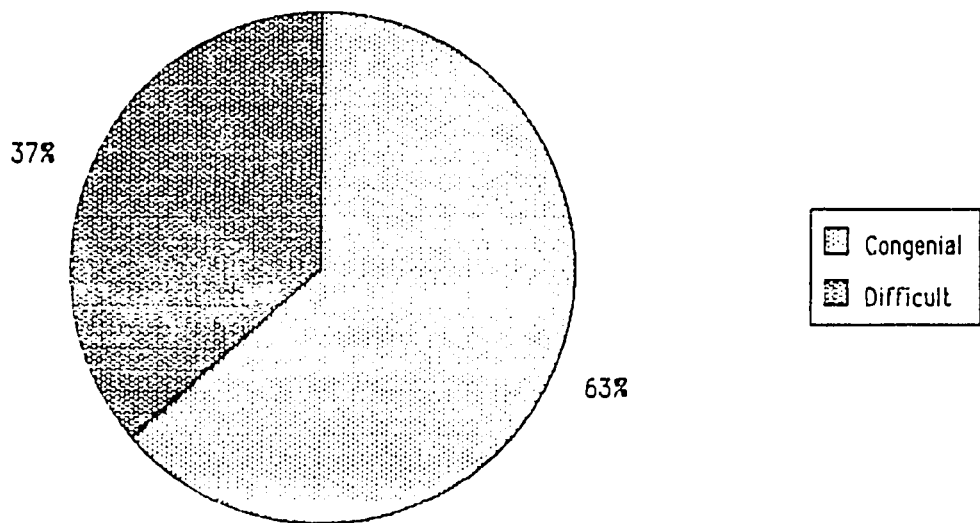


FIGURE 3

Percentage of Teachers Trained in Distance Education
by School Type

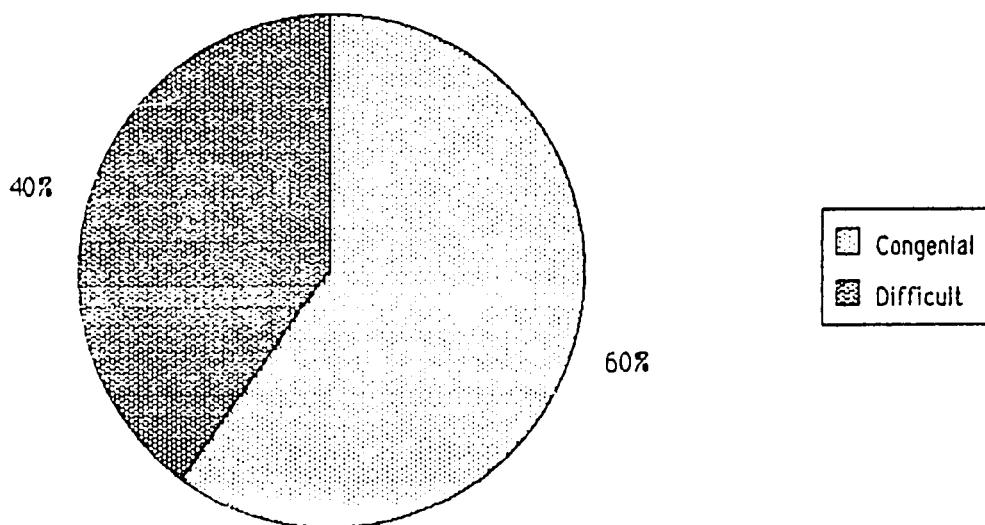
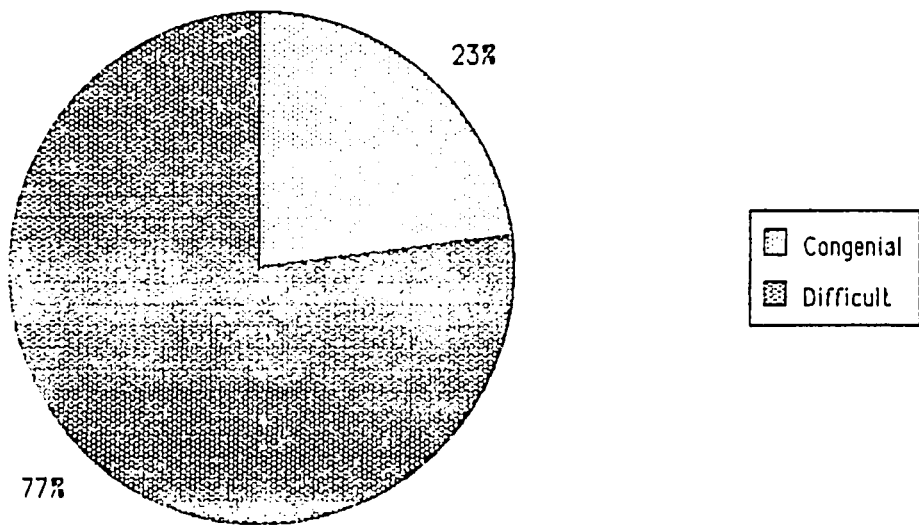


FIGURE 4

Percentage of Untrained Teachers
by School Type



V. ANALYSIS OF TEACHER EDUCATION APPROACHES IN SRI LANKA
AND PROGRAM IMPLEMENTATION

Analytical Review of Teacher Education in Sri Lanka in the Context of
Educational Reform and Impact on Program Implementation

The history of teacher education in Sri Lanka¹ is marked by change throughout which three characteristics are constantly present. The most important characteristic is the relevance of the close relationship between the teacher and the taught which signals the strong influence of Buddhism in all realms in the country's life. Buddhism a philosophy that stresses the power of the rational and disciplined mind over other inclinations of human nature, heavily relies on education and the special relationship between the teacher and the learner to achieve its highest aims: to impart the teachings of Buddha. The Buddhist influence therefore, helps explain the deep concern to educate the people of Sri Lanka, and it has characterized educational policies throughout the years.

A second characteristic is the presence of religion in education at all levels in close correspondence with the diverse ethnic groups in the country.

The third characteristic is the purposeful adaptation of imported models of teacher education to the diverse needs of the country to compensate for the lack of a comprehensive indigenous model to educate teachers. The introduction of foreign models is a response to the growing economic and developmental needs of the country. These models have been adapted to serve three overall purposes, to contribute to the economic development of the country, to preserve the cultural traditions, language and ethnic identity of centuries old cultures, and to pursue the integration of diverse cultures living in Sri Lanka into the economic system of production.

This continuous search for a model to educate teachers is the most powerful force behind the current educational reforms. In the next section I describe recent reform initiatives and their effects on teacher education.

Current Educational Reform in Sri Lanka and Its Effects On Teacher Education

Since independence in 1948, the Ministry of Education has sought to implement diverse policies that reflected the government's commitment to provide equal and better education at a national level to the people of Sri Lanka. Over the past decades a number of policies aimed towards improving the "quality and relevance" of the public educational system have been introduced. This reforms see the school as formally organized "to raise the level of skills in the population that will support economic growth, provide an adequate supply of expertise, and improve the quality of life of every individual"²

The role of the teacher outlined by the state in this enterprise is seen as strategic. In the words of the Education Reforms Committee:

"[I]t is the teacher who mediates education [...] It thus becomes of crucial importance that the country should know from where he comes and what he has to give; should watch his progress and help him improve himself; should build up and keep alive a genre of men and women who will preserve all that is best in culture and traditions and at the same time forge ahead as agents of change."³

While the teachers are seen as a central part of the educational effort it is largely recognized that they have not been provided with the elements that will contribute to having an effective role in educating pupils (one of the more common examples is student drop outs). Factors that have affected teacher quality are inadequate methods of recruitment, low standards for admission into the profession, the limited capacity of the system to train teachers, and the frequency of teacher transfers. Additional factors are located at other levels such as inefficient training programs, and inappropriate curriculum and equipment in schools. Other less controllable factors that may interfere with teacher's performance, according to the reform committee, are the interference of politics in the realm of schools, and the sometimes observed lack of responsibility from the teachers themselves.⁴

In the following section I proceed to review the problems with the teaching profession that prompted a movement towards innovations in teacher education as seen by Sri Lankan educators and policy makers.

Teacher education and the teaching profession

Up to recent times in Sri Lanka due to the growing student enrollment⁵ and the consequent urgent need for teachers, aside from the teachers formally prepared by the system in teacher colleges and other institutions, almost anybody who fulfilled the G.C.E. O/level (general certificate of education ordinary level) examination requirements after senior secondary school, could go into teaching after a short induction preparation and a series of selection interviews. The practice of recruiting teachers in Sri Lanka had occurred at two levels, recruitment of those with a degree from a recognized university, those possessing a G.C.E. (O/L) Certificate.⁶ These recruits would receive a short orientation and an in-service training course lasting no more than 3 weeks; additional training would be allocated sporadically, and often in terms of seniority (teachers who have been teaching longer have first priority for receiving training) throughout their careers. With some exceptions, people who do not reach the high grades and qualifications required to enter the university and people who are looking for job security would turn their attention to teaching.

According to the committee in educational reform, the failure of teacher training can be located in four major areas: lack of adequate resources, unrealistic curricula, students with low academic qualifications, and poorly qualified teacher educators.

It is widely known in Sri Lanka that the quality of institutional teacher education program is low and that they have not been able to fulfill their

purposes at an acceptable level. Institutional training for teachers was expected to provide the students with opportunities to reach higher academic status and to combine theory and practice. The failure of these programs to achieve their goals is attributed in part to the inefficient administration of scarce resources. A reflection of this factor can be seen in the difficulties these programs have encountered to sustain a library or to reduce the class size in current teacher training institutions.⁷

Another perceived source of failure is the irrelevance of the curriculum. There is a felt need from educators and the reform committee to harmonize formal and non-formal education, to attend the demands of the community, to develop interdisciplinary dialogue with other professions which impinge in education, and to address national concerns such as inter-racial harmony and development. In addition, the methods of instruction are outdated such as the overuse of lectures, and the internship usually goes without supervision by faculty members.⁸

In the early 1960's the decision to drop the exam requirements for entrance to teacher education institutions is seen as one of the causes for the low quality of the students who enroll on teacher education. Problems in the programs themselves contribute to the poor preparation these teachers receive. For example, facilities for teaching practice are not normally provided for the trainees and therefore the contact with schools and communities is rare. In addition, available facilities within the institutions have been underutilized such is the case of centers for study, research, and experimentation. The endemic lack of communication and possibly duplication of functions between institutions of higher education in the country can be seen in teacher training institutions, universities and in the curriculum development center.

Teacher educators⁹ have traditionally worked independently with little assistance from their colleagues or superiors. As a consequence, lecturers often set their own standards of conduct and teaching without following a coherent program of teaching that goes along with institutional or national goals.

The curriculum followed in teacher education is considered by the reform committee as irrelevant to the needs of the country and the mission of the new teacher. Such curriculum mostly guided by both internal and external examinations and the lack of provisions for the involvement of the enrollees in the actual practice of the schools, could not but separate teachers from their expected role. In fact the curriculum in teacher education institutions seems to contradict the aims of critical thinking, individual education and leadership required by the teacher.

Teacher unions and teacher's affiliation with a political view or party, are seen disapprovingly by the state. This association is frequently blamed as one of the causes for the low quality of the profession. However, because of the poor conditions under which the teacher is expected to work and the often times arbitrary decisions with reference to transfers, the teacher has no other alternative but to turn to his/her colleagues in search of support. Unless the situation changes drastically in Sri Lanka there is not reason to expect the voluntary dissolution of these unions.

The state's expectations from Sri Lankan teachers, are clearly outlined in a series of guidelines named the "teacher's charter." These guidelines specify what teachers are expected to do and how they are expected to behave with their pupils, in the school, at home, neighborhood and society, with the authorities, and finally the rights and privileges of teachers with reference to education in general (i.e., training to improve professional, academic, and

economic status.)¹⁰ These expectations, however, have not been followed by improvements on the conditions under which teachers teach or live.

The current discontent among the teacher profession (and another concern of the reformers) are a result of increased expectations in terms of employment and salaries associated with more years of schooling. After the 1950's the modern sector of the economy has been unable to absorb even a fraction of the large numbers of educated youth seeking jobs. By the end of 1977 the general unemployment rate had reached 20 percent of the work force. Its incidence among youth was much higher than the general figure and higher among the more educated. At the time the reforms were proposed, there was a lack of standardization on salary scales both at the points of entry and in subsequent promotional levels. A proposal to solve this problem by the reformers is to have the same salary scale to all professionally and academically qualified teachers. Thus training should come associated with a better salary and opportunities for promotion.¹¹

Teachers are expected to be responsible for their behavior in their community and initiate activities both inside and outside school. The committee on reforms assumes that the quality of the training these teachers receive directly impinge on the degree of initiative that is required to teach. This assertion is closely related to the quality of the existent curriculum and the manner in which it is delivered. It is assumed that a rigid curriculum that relies mostly on lectures and which neglects the inclusion of activities to stimulate leadership inhibits the very goal of forming teachers as responsible and entrepreneurial individuals.

In short, the issue is seen by recent educational reforms as one of teacher quality. In the words of the scholars of education working for the Ministry of Education:

"[I]n Sri Lanka the teachers of the olden days occupied a place of honor in the society and designated Guru in national languages, were almost looked upon with reverence by the common folk. This honor was bestowed on them because of the dedication with which they performed their task of imparting knowledge and skills. Our teachers held this revered position until a few decades ago. But in recent times we have witnessed a gradual deterioration of the status of the teacher, with the result that the teaching profession today has failed to attract people of the right calibre... [I]f the teaching profession is gradually drained of teachers of good quality, it has to be considered a major disaster, specially for a developing nation, because national development is dependent to a very great extent on education."¹²

In summary, since Sri Lanka's independence in 1948, when the Sri Lankan government declared its commitment to universal primary education, the Ministry of Education has been introducing a series of policies aimed primarily at improving the quality and relevance of the public educational system. Reforms of teacher education have evolved as a result of this comprehensive effort to improve education modifying or giving birth to diverse approaches of teacher education. In spite of these efforts, Sri Lankan educators report that the quality and status of the teacher has never been lower.

Educational Reform: Crafting a New Role for the Teacher

It should not be surprising to us that in Sri Lanka as well as in other countries in the world the teacher is expected to solve not only the problems that are present day to day in the classroom, but the social and political ills of the society as well. A good example of the expectations of the reformers is the list of characteristics that these teachers should possess.

A new role for the Sri Lankan teacher has been conceived stemming from the reforms, accordingly with these guidelines the new teacher should be:

Exhibit 1

o A sharer of knowledge, "the teacher cannot longer consider himself a dispenser, rather he is a sharer of knowledge. He does not lord it over his class. Humble and willing to learn through professional training and from his pupils, he will go with them hand in hand, as on an adventure."

o An authority in his field, "[...]but humility does not mean ignorance. The teacher should be able to speak with authority in his particular field of instruction. Indeed research has shown that it is 'knowing his subject'; more than any other quality which endears him to pupils and wins their respect."

o An example for and lover of children, "the teacher should be exemplary in his conduct. He will be disciplined not only because he is always under scrutiny but because he is a member of a staff under the authority of a principal. He will be conscientious and methodical, fired with a sense of commitment, and conform rigorously to a 'regimen of work.'"

o A conciliator of cultures, "developing countries striving to free their peoples from the shackles of colonialism aim to build an indigenous way of life. Thus the good teacher must be sensitive to the interlocking spiritual and cultural values that prevails in his land and in a global society that lies at his door-step. He has thus the difficult task of reconciling tradition oriented structures with those that are future oriented, and he must himself fit into this pattern."

o A coordinator and a leader, "the child of today is open to a number of educative influences which provide a variety of experiences and expertise that is beyond the reach of the average school...It is the teacher's task to study this extended environment... and to bring into the narrow world of formal education the broader vistas of life and the element of reality which the child needs. Thus the teacher cannot claim to have the monopoly of education; he is a coordinator of educative influences... a leader or animator."

o A catalyst of change, "education and society are constantly influencing each other. In Sri Lanka the interaction has been mostly that of school on community and this one-way traffic is likely to last so long as our people continue to leave education well alone. The teacher stands for decent and orderly progress and is preferred to the more radical type of leader whose techniques are apt to be theatrical and revolutionary. Thus by reason of his academic status, professional training and locale (at the heart of a teaching-learning community) the teacher ideally fills the role of a catalyst of social change."¹³

In Sri Lanka then, in the rhetoric of the reform committee, the teacher is seen as occupying a strategic place in the dynamic community of the school and society. Teachers are seen as a breed of men and women who "will conserve all that is best in culture and traditions and at the same time forge ahead as an

agent of change." The changes planned in the school system are seen by the reformers as broadening and enhancing teacher's influence. Thus the State sees as an important responsibility the recruitment and training of a new type of individual.¹⁴

In addition to changes in the remuneration and promotional aspects of the teacher profession to offer an attractive salary scale and opportunities for promotion to all professionally and academically-qualified teachers, one of the main instruments of the educational reform for recruiting and training a new type of individual are teacher education programs in their diverse modalities. Thus teacher education is expected to develop mechanisms to attract qualified people to the teaching profession, help to retain qualified teachers specially in those areas in need of good teachers (rural areas), improve the economic, professional, and academic status of the teacher, provide an adequate supply of well trained and qualified teachers in order to improve the overall quality of the educational system.

The following section describes the strategies that have been followed by the authorities in order to improve the quality of teacher education within the framework of the reform.

Carrying Out The Reform Mandate

Two types of strategies have been followed in an attempt to improve the quality of schooling through teacher education in Sri Lanka.

The first strategy cuts across programs and proposes to (1) raise the standard of qualifications required from those who enter teacher education; and to (2) introduce changes in the curriculum of teacher education to both correspond with changes that have been implemented in the elementary education

curriculum (from a subject oriented to an integrated curriculum). Curricular changes attempt to provide a more in-depth understanding of the subject as well as the teaching methods available to the teacher. Most of the changes have been implemented gradually and exams for admission to training programs as well as the requirement of three passes in the G.C.E (A/L) examinations are now needed for entrance in the most recent approach to teacher education. A series of internal, continuous, and external examinations are also required to successfully end the programs and to enter teaching. Curricular changes have been implemented by committees of teacher educators and program directors/presidents formed specifically to develop and re-think the curriculum according to the new image of the teacher. The type of requirements for entrance and exit and the curricular changes in the three approaches to teacher education are described in the next section.

The second strategy can be found within teacher education programs. This strategy has consisted of gradually phasing out Teacher Colleges the 3 year recently reduced to 2 years training program for non-graduate teachers. Eleven Teacher Colleges started this three year modality in January 1981. Introducing distance education for in-service training that was implemented in 1983 and trains untrained teachers in service. The distance education modality has 30 regional centers, and its duration is 3 years and can be extended to five. This program originated as a response to the limited numbers of teachers that Teachers Colleges were able to train and as a way to accelerate the process of training. A pre-service teacher education approach was introduced as well as part of this strategy and started functioning in 1985 with seven Colleges of Education. This program seeks to implement the policy of progressively giving up the practice of recruiting untrained teachers into the teaching profession. This program lasts three years, at the end of their studies the graduates

receive a "Diploma in Teaching," which sharply contrast with the "Teacher Certificate" received by Teachers Colleges and Distance Education graduates.

At present, Teachers' Colleges, Colleges of Education and Distance Education train 14, 15, and 71 percent respectively of the primary school teachers enrolled in these training approaches. About 60 percent of teachers at all levels have received some kind of training. In fact, the trends from 1946 to 1979 show an impressive effort to provide preparation to teachers, especially within the last 20 years, from 29 percent in 1946 to 61.2 in 1979.¹⁵

In spite of this major effort, the challenge is still present since close to 40 percent of teachers currently teaching in Sri Lankan classrooms have not received any professional training.

In summary, a rapid increase in the population of school age children has been accompanied by an increase in the number of untrained teachers employed by the schools. Because most of these "emergency teachers" did not have formal teacher training the alternative was to provide them with short induction courses and short and long in-service courses along the road. Distance Education is an approach created to solve in a more efficient manner the issue of a large number of untrained teachers. A large number of teachers, have been trained under the distance education approach at a relatively low cost, clearing the backlog of untrained teachers. As a consequence the Ministry of Education (MOE) is turning its attention to the development of pre-service teacher preparation approaches such as the Colleges of Education. Because the quality of the teacher in Sri Lanka is low the priority of the government is to raise the standards of the teaching profession by attracting good qualified individuals to go into teacher education after general education. A series of incentives have been devised to attract these individuals such as a subsidized

teacher education, and housing as well as the possibility to obtain a diploma and higher salaries. Although these three approaches differ, the tendency of the educational authorities is to strengthen certain types of approaches while eliminating or transforming others. The following section describes the framework used to study the different approaches to teacher education and analyzes the underlying assumptions framing the programs in an effort to understand how teachers become effective teachers in the Sri Lankan political, social, and economic context.

Three Approaches to Educate Elementary School Teachers

In previous sections of this paper I have attempted to describe those events that have prompted innovations in teacher education and the objective of these innovations. In this section I analyze how the different mechanisms that have been devised to implement change in teacher education. Thus each approach will be analyzed looking at the problems affecting the quality of teacher education as identified by the reform committee and the specific responses each of the approaches provides. (These problems, described earlier in the paper, are the low quality of recruits coming into the teaching profession, the quality of the teacher education programs, including the available resources, the learning opportunities provided to the students, etc., a rigid and irrelevant curriculum, the lack of professionalism in the teaching profession or of the teacher unions and their involvement in politics, the lack of commitment to the teaching profession, and the lack of leadership and collegiality among teachers.) Parallel to the concern for addressing each of the identified problems, teacher education is at the same time pulled towards the "image of the new teacher" characterized by a multi-faceted role as a sharer of knowledge, an authority in subject matter, a lover of children, a

conciliator of cultures, a coordinator and leader, and a catalyst for social change.

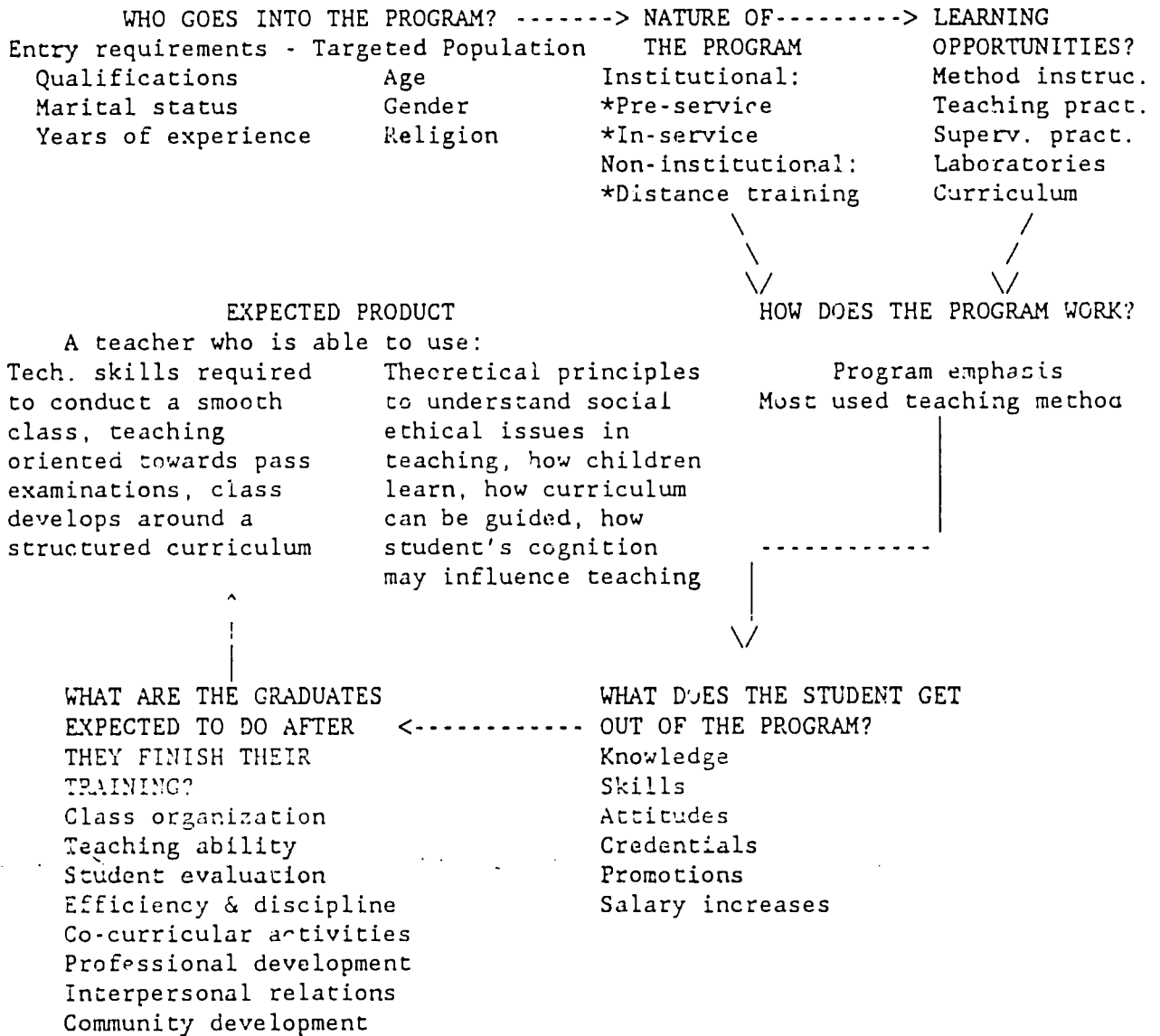
The first part of this conceptual analysis then, requires an understanding of the context under which these approaches originated as well as the basic principles that guide a philosophy of teacher education in Sri Lanka. In analyzing the efforts of the approach to respond to the policy mandates it is essential to consider the entrance requirements (especially if we are talking about raising the quality of the teacher profession), and its link with the nature of the program (i.e., in-service, institutional, pre-service, or whether the program through which the envisioned approach to train teachers is to be implemented is constantly changing). One of the most important features of a new conceived approach to educate teachers for Sri Lankan policy makers is the learning opportunities that the program provides to teachers and strategies as to how can these be maximized or adapted to the particular situation.¹⁶ A closely related factor is the question of how is the program conceived (i.e., as a series of courses that students attend and where the medium of instruction is lectures? does it include teaching practice?) In short, how is the program attempting to "professionalize" the teacher to bring about an individual with a deep commitment. The manner in which the program arranges all these factors can be seen as focused towards the "production" of a certain type of teacher. In the case of Sri Lanka the ideal teacher has been clearly delineated by the reform committee thus we need to ask whether the entry requirements, the nature of the program, the learning opportunities, the implementation of the curriculum, the credentials and the evaluation standards contained in an specific approach could better produce the "type of teacher" envisioned by the reform. The conceptual framework used to analyze the programs is shown below:

Figure 1

Conceptual Framework to Analyze Teacher Education Approaches

CONTEXT

How did this approach come about?
 Is this program the result of reform policies?
 What are the social, political, economic and cultural contexts of the program?



CONTEXT

180

The context

Before I proceed to present the three approaches to teacher education in Sri Lanka it is necessary to understand the principles currently guiding teacher education in the country. The ideal of teacher education is to bring together two fundamental perspectives, that of "laying the foundation for the future," and that of "meeting the country's needs at a particular time."¹⁷ These two perspectives thus entail a complex mixture of philosophical principles of education and economic goals for the nation when delineating the direction of education at all levels. Whereas the espoused philosophy of Sri Lankan education has been guided by a concept of men focusing in the uniqueness and dignity of the individual with the teacher providing the kind of environment in which "the child will unfold like a flower," this view is constantly challenged by others that see education as acquisition of "problem solving" skills or education as a mean to attain scholarly status in a particular discipline. Other views are strongly influenced by the western idea of the role of men in society with competency as a criterion of achievement and the teacher as a clinician who diagnoses or prescribes what is needed to promote achievement in children.

Although the advances in education and technology in the West are widely acknowledged, the view guiding Sri Lankan education deeply rooted in the Buddhist belief that "there is not true education except within the bond between the teacher and the taught, whether in school or at home"¹⁸ strongly prevails. In fact, one of the guidelines to reform teaching education warns against infatuation with the educational advances made in the West and succumbing to the pressure from the pace of social change, and recommends that,

"[W]hile there is much that we have learned and can learn from the developed West, let us at the same time look towards our own culture and, before it is too late, identify, appraise and adapt it in enunciating our philosophy of education, in shaping our schools, and in formulating programs of training for our teachers."¹⁹

Teacher education programs, thus, seem to reflect a compromise between preserving a centuries old culture and moving along in the path of modern development. Teacher education is seen as an on-going process, and it is conceived as including on-the job-training, institutional training and continued or post institutional training.

Three approaches to educate elementary school teachers have been considered relevant for future policy in Sri Lanka: the Teacher Colleges, Distance Education, and the Colleges of Education. Each one of these approaches is seen as contributing to the ongoing process mentioned above. I proceed to describe each approach below.

The teacher education approaches:

Entry requirements, the nature of the program, and learning opportunities

Because these approaches have been described in detail in the Background section of this report, this section presents an analytical summary of the most relevant features of each of the approaches under study.

Teachers' Colleges The main objective under which this approach was created was to enable an heterogeneous group of current teachers to acquire the knowledge and develop the skills and attitudes necessary to achieve an adequate teaching performance in an ever changing educational system. Specifically this approach was aimed to prepare the teacher to deal with the new scheme of education which re-structured the span of schooling, introduced a revised curriculum, textbooks and examinations. This approach caters to a group of teachers with varying abilities both in academic qualifications and teaching experience. In academic qualification they vary from those who possess the

minimum C.C.E (O/L) to those with higher qualifications such as G.C.E.(A/L), Diplomas in special subjects and General Arts and Science Certificates from the University. In teaching experience they vary from a minimum of two years to up to twenty years.

Thus this approach provides institutional technical training to untrained teachers. It involves two years of course work based on a curriculum focused on teaching methods and relies on lectures as the main method of instruction. Up to 1987 this program had a one year internship that apparently was not effective (mostly because of limited resources) and has been eliminated as of 1988 from the formal program. Evaluations consists of examinations at the end of each term (5 in total), the external examination in the subject area, evaluation of teaching practice, and an interview before a board where they present their professional achievements for review such as assignments, and other project work like teaching aids, and lesson notes. The graduates of this program receive a "Trained Teacher Certificate," along with an increase in salary and possibilities for promotion although they are initially posted to difficult schools.

Institutional costs of this training approach are moderately high since the teachers/trainees are given a paid leave of absence for the two years they are enrolled in the program, and in some cases teachers/trainees live in hostels or quarters provided by the program itself. The private costs are also high because in some cases participants have to leave their families, and pay tuition in addition to the foregone income for the two years of training.

The Distance Education approach is an alternative implemented by the Ministry of education in 1983 to provide professional teacher education to an approximate number of thirty-five thousand teachers. This strategy is a way to supplement the limited capacity of teachers colleges to train teachers. In

addition to reach a large number of trainees this approach is considerably less costly. Whereas the institutional cost per trainee in the institutional approach (teachers colleges) was about 8000 rupees the institutional cost in the distance education approach was about 2000 rupees in 1935.²⁰

The Distance Education approach consists of providing in-service training, to untrained teachers with G.C.E. O/L and A/L qualifications. The program involves three to five years of course work, the curriculum is mostly subject matter oriented although it also includes courses in pedagogy, they learn at their own pace through programmed exercises and reading materials. Monitoring and evaluation is done in meetings over the weekend or during school vacation in the so called regional centers where they meet with a tutor to solve questions or to simply hand in the units they have just finished and to pick up the following unit. Evaluation is continuous and is done by revising assignments and modules, face to face contact sessions, and practical work, a year end written test in the subject areas and practical tests, and a final external evaluation. At graduation teachers obtain a "Trained Teacher Certificate" and are obliged to teach in a government school for at least two years. As a result of this certification they receive an increase in salary. The institutional costs are relatively low in this program including basic learning materials, payment of tutors once or twice per week, and maintenance of the regional centers. Personal costs are also relatively low, the teachers do not have to leave their families, they live in their homes, and continue working while they receive their training. They do pay tuition, and have to give up week ends and other free time for three years.²¹

The Colleges of Education in 1981 as a result of studies on the quality of teaching and teacher education, a policy statement decreed that a new concept the pre-service approach to educating teachers should be seriously considered

and that the current Teacher College approach should be reduced to one year of in-service training with one year of internship. The Ministry of Education decided as a policy imperative that all those going into teaching profession should receive pre-service training in teacher education before being appointed in schools as teachers. The principles guiding the creation of the Colleges of Education in 1985 were stated by the reform committee as follows:

[T]o develop education the teachers quality should be developed. The professional education that a teacher obtains should be of a level where the national goals and aspirations are achieved; those who enter the teaching service should be able to face successfully the challenge of teaching intelligent pupils in schools and to fulfill successfully the task of turning out the younger generation into a fruitful human resource, the expectation is to change the belief that anybody could effectively carry out the job of teaching; to select a group of people to the teaching profession who have attained a high intelligence level and to give them professional education about the service that they are going to embark upon before they take over the task of teaching.

The premise of the Colleges of Education is to provide high quality (in such aspects as facilities, teacher educators, instructional opportunities) pre-service training, to young (18-22 years) well qualified senior secondary school graduates. In a period of two years of critical liberal education, provide them with seminars, introduction to the community, carefully supervised one year internship, rigorous evaluation consisting of projects/assignments, interviews, unit tests, observations, periodical examinations, and the external evaluation which is a written examination of the subject area. The internship is evaluated in terms of preparation of the lessons, carrying out instruction, classroom management, and teacher personality. At their graduation the students receive a "Diploma in Teaching," their salary will be higher than the teachers holding a Trained Teacher Certificate, but lower than the those of teachers holding a BA, and their possibilities for promotion are better than those of the teachers holding certificates although they are initially posted to

difficult schools. The institutional cost per student is very high since it includes a monthly stipend for three years (out of which they pay tuition), meals and housing for three years, uniforms, study materials, etc. The private costs are relatively low since these students are single and had not hold a job before which makes it difficult to talk about forgone earnings in an economy with a high rate of unemployment. They do not get to go home often, however, and cannot get married while in the program. This approach was first implemented in 1985 and it is seen as a prototype for future teacher education in Sri Lanka. These colleges are entirely supported by the MOE.

The teacher education approaches:
Curriculum Implementation and emphasis areas

A good indicator of how teacher education approaches conceptualize effective teaching, is the curriculum they have developed and the emphasis on the different aspects of such curriculum. What follows is a table showing the areas covered by the different approaches to educate teachers and the units (either time or in the case of distance education modules) assigned to them.

Figure 2

EMPHASIS AREAS OF THE THREE APPROACHES TO TEACHER EDUCATION IN SRI LANKA²³

Emphasis Areas	Teachers' Colleges % /clock hrs	Colleges of Ed. % /in clock h.	Distance Ed. % /modules
Professional (Foundations)	23% (600)	17.6% (480)	20% (21)
Primary Education (Principles of Primary Education)	41.2% (1080)	19.7% (540)	48.6% (51)
General Education (subject matter)	16% (420)	20.8% (570)	31.4% (33)
Teaching Practice	10.7% (280)	10.9% (300)	3 times in the academic year
Co-Curricular Activ.	9.2% (240)	30.7% (840)	2-2 day session 5 day session
Internship	1 year suspended in 1988	1 year full time	In site
Examinations	Internal External Continuous	Formative Summative Continuous	Intermittent Final Continuous
Methods of Instruction	Lectures, discussions demos, projects, assign micro-teaching, team-t., simulations, field trips, comm. dev. proj.	Lectures, discuss, seminars, debates, team-teach.. role play, simulations, observations, exper, discovery, methods, diagnostics.	Printed material assignments, face to face contact sessions in regional centers, practice teaching.

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The areas included in the different approaches to teacher education apparently vary more in the emphasis (i.e., length of time or number of units dedicated to each area) than in the general curriculum that guides course work. Important differences can be observed in co-curricular activities, internship and methods of instruction. The emphasis in co-curricular activities evident in the newest approach (the Colleges of Education) is a response to the reform mandate of developing "the complete teacher" or the "complete person" through education. "[C]o-curricular activities may have a greater and more lasting influence than the general subjects in enriching the child's experience and providing him with opportunities to discover his aptitudes...[i]t will be necessary to make it possible for larger number of pupils to participate in such activities...[that have been] mainly confined to the larger schools."²⁴ The type of examination although with different names achieve the same purpose. Examining the areas included in the diverse teacher education approaches, their rationale and the emphasis given to them by the program serves to illustrate on the one hand the understanding of the aims of the reform and its implementation, and on the other the image of the effective teacher held by the particular approach.

In Teachers' Colleges the curriculum seems geared towards both updating and improving the knowledge of subject matter these teachers bring with them as O/level graduates. Great relevance is placed in providing knowledge of psychology considered important to understand the child and in pedagogy, the acquisition of practical knowledge, the development of team spirit, and to "learn to accept defeat," develop good attitudes, and develop talents.

Internships have been discontinued for 1989 because of inefficiencies in the system (i.e., too costly to supervise the students in the schools, and lack of a structure to motivate principals to cooperate with the teacher's colleges

skills among which the most important are the co-curricular activities which are designed to help the teacher become an effective leader in the school and community.

The teacher education approaches:

Describing the image of the effective teacher pursued by the approaches in terms of knowledge, skills, and attitudes

The different dimensions a teacher should have according to the reform can be summarized according to eight performance areas by which the teacher is evaluated once in the classroom according to their level of importance assigned by the reform committee:²⁸

<u>Performance Areas</u>	<u>Percent</u>
1. Class organization	10
2. Teaching ability	30
3. Student evaluation	20
4. Efficiency and discipline	16
5. Co-curricular activities	10
6. Training and profess dev	6
7. Interpersonal relationships	4
8. Community development act.	4

The rationale of why these eight key performance areas is important in order to understand the direction taken by teacher education approaches in their effort to produce a teacher that could promote quality education. Quotes from interviews and document analysis clarify these rationales:²⁹

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Exhibit 2

Class Organization

"A well organized classroom environment contributes immensely to the teaching-learning process. This is conducive to making both the teacher and pupil aware of the importance of a well managed classroom. Moreover the limited facilities available to the teacher in most of our classrooms make considerable demand on the resourcefulness of a teacher in making optimum use of these. As teachers are expected to plan the availability of equipment for future lessons, classroom management and organization can be considered essentially as a basic function of a teacher." Examples of classroom organization behaviors as exhibited by the teacher may be checking the attendance of the pupils due to participate on a lesson, maintaining class control during teaching, and making use of the class leaders during a lesson."

Teaching Ability in the Subject(s)

"It is fundamental that the teacher should demonstrate competency in any subject which they teach. This signifies the capacity to design appropriate instructional materials to conduct class, group and individualized instruction based on learners needs, guiding and facilitating learning, motivating pupils for self-learning and so on." Examples of appropriate subject teaching is preparation of a methodical and practical scheme of lessons; notes of lessons with reference to the syllabus and course guides; use of necessary teaching aids, and successful use of resources in the school environment in the teaching activity. In addition the teacher should have a through knowledge of his field; develop a teaching style of his own from the accepted teaching methods, motivates students for further study, and completes syllabus within the time allotted."

Student Evaluation

"Evaluation is an integral part of instruction. The traditional concept of evaluation has given way to more modern interpretations of evaluation...where (evaluation) is seen as a measure of progress . Student evaluation can also be a measuring instrument in order to gauge teacher performance. Evaluation also means diagnosis in which the teacher's ability to find out the areas in which students need special attention and use these as a basis for planning learning experiences." Examples of this category are teacher makes evaluation at the end of a lesson or unit; supervises regularly student exercises and assignments; formulates carefully question papers for monthly terminal and year end tests; evaluates results of tests with pupil participation and makes use of findings in the learning teaching process; and maintains continuous records of student progress."

Efficiency and Discipline

"A teacher should necessarily have developed desirable attitudes and values towards his job. Our society still expects a sense of dedication and exemplary behavior from a teacher. His behavior must serve as a model of emulation to the younger generation; therefore he has to be careful in how he conducts himself both within the school and outside. His ethics, the vocabulary he uses, his outward appearance, all these must be in keeping with the mores of a noble profession. However learner or qualified a teacher may be, his attitudes and values towards his duties and responsibilities as teacher will have a desirable or undesirable impact on his performance depending on the nature of his

in supervising teachers).

Most of the instruction is based on lectures. An effort has been made to diversify the methods of instruction but the lack of resources such as an open library in the college, lack of staff, among others makes this difficult. Other methods include discussions, demonstrations, projects, assignments, micro-teaching, team teaching, simulation, field trips, guest speakers and community development projects.²⁵

The aim of distance education program is to develop professional education of teachers in the cognitive, affective, and psychomotor domains.

There is great emphasis on helping the teacher develop the knowledge and skills needed to build contributions between school and society and enable the teacher to understand his/her role into the national educational system in terms of skills and code of conduct. It also attempts to provide knowledge of prevailing learning theories and their application to the learning process.

Special emphasis is placed in pedagogy and in subject matter and in the development of skills for successful classroom management by creating "learning environments."

General education includes the development of knowledge to teach the subject areas included in the curriculum of Sri Lankan schools, inculcate a liking towards teaching and develop favorable attitudes for upholding the dignity and pride of the teaching profession and for systematic organization of learning-teaching situations building on the students knowledge.

An important feature of the distance education approach that makes it different from other distance education methods is the combination of teaching practice and the interaction with tutors (three practical sessions are held during an academic year and each lasts for two days, they are expected to facilitate putting into practice theoretical knowledge provided in the modules,

and a tutor visits the students in their schools three times during the academic year in which the teacher receives guidance and advice on their actual classroom performance.) A complementary innovation to consider in this approach to distance education is the creation of regional centers which role is to provide supportive service to the learners. Such support services are reinforced learning through evaluation and feedback, counseling, face to face contact sessions dedicated to co-curricular activities (one day study circle, two day practical sessions, five day vacation contact sessions, and school visits by tutors). In addition to these roles the regional centers perform administrative as well as evaluative functions.

Methods of instruction are mostly printed materials, assignments, face to face contact sessions in regional centers, and practice teaching.²⁶

The Colleges of Education sees itself as forming the whole individual, the curriculum is balanced for the different areas included, and students are encouraged to think critically. Accordingly the strategies of teaching emphasize more group discussions, debates, team teaching, role playing, simulation, observation, experimentation, discovery, methods, and diagnostic method than lectures.²⁷

While the areas and subjects included in the curriculum are apparently similar, the description of the purposes and rationale for the areas included in the curriculum differs according to the approach. Whereas Teachers' Colleges sees itself as a remedial program and as updating teachers knowledge with a pedagogical orientation, Distance Education sees its mission as teaching subject matter taking full advantage of the immediacy of the teacher in the classroom to improve the teachers skills through advice in the so called teaching practice sessions. The College of Education sees itself as a well rounded teacher education providing well qualified individuals with teaching

attitudes and values." Examples of this category are the teacher shows punctuality in attendance and departure, maintains attendance register and class record book methodically, fulfils any other alternative task assigned to him by the principal; and engages in fruitful activities without wasting time during school sessions."

Co-curricular activities

"The teacher is thus made aware of the entire school set-up and the place he occupies therein. For the pupil, an all round education implies an involvement in both academic and non-academic spheres. These activities provide an essential link between school and the community." Examples of these are the teacher performs duly all office work and any other work entrusted by the principal; extends full cooperation in all extra activities of the school: sports, scouting, "cadeting," school societies, etc.; shows interest in the work of the school development society and in the O.B.A. and O.G.A."

Training and Professional Development

"The productivity of a teacher depends on his keeping in touch with new trends in education. To achieve this a teacher must collect relevant factors and information by constantly reading, participate in study circles, and in-service training programs regularly, experiment with innovations and follow training courses for professional growth." Examples of this are keeps abreast of knowledge through wide reading. Is fond of making use of the mass media to impart information; participates in in-service seminars and attempts to implement proposals made; shows interest in new trends in education, follows various courses of study and does research work for advancement of professional level."

Interpersonal Relations

"A teacher's effectiveness lies to a great extent on how he interacts with the principal, staff, student, parents and other community members who share in school management. He must maintain a healthy relationship with all those involved in the school organization." Examples of this works in co-operation with the principal and staff; maintain excellent rapport with students, parents, past pupils and minor staff."

Community Development Activities

"The teacher is now looked upon as a change agent and his leadership in community development projects is very much appreciated by the society. This is a role required by national education responses to contemporary socio-economic needs." Examples of this engages in the planning of adult education programs and in the work of religious educational organizations; assists the various societies in the district in the organization of sports, functions and other social activities."

As a way to validate the "image of the ideal teacher" I asked teacher educators to describe a class where the "ideal" was represented. I then showed the resulting scenarios to other teacher educators and agreement was reached about the best representation. This representation is shown below:

Exhibit 3

Learning Arbitrary Units of Weight. Elementary Education Year 3³⁰

The class consisted of about 40 students grouped into 6-7. The teacher had instructed each group the previous day to bring an improvised balance and demonstrated how to make one with coconut shells or with lids of tin cartons.

Each group was given a balance and a set of objects such as nut seeds, large pebbles, stones weighting nearly 500 g., sand packed, match boxes, nails, etc. Before that the teacher introduced the students to the lesson. She said that they are going to do some new things, and reminded them of their former experiences in ordering objects in relations to their weight. Then she asked them to find out the heavier object out of the match box, stone, and a piece of steel. The children eagerly engaged in the work. Meanwhile the teacher went from group to group and discussed the method they used and the result they got.

Then she asked them to take a nut seed and a match box, and to see which is heavier. The children at once answered 'the match box.' The teacher acknowledged the answer and posed a new question. "Can you find out how many seeds are necessary to balance a match box?" The children began to put seeds into one tray of the balance until the balance was in equilibrium and counted the number of seeds.

The teacher shows her appreciation in students efforts and related the result got by each group to the whole class. She wrote on the board:

11 seeds -----> match box
10 seeds -----> match box, etc.

Each group shows approximately similar results and they write down the results in their note books. Next she asked them to do the same with a set of smaller seeds. Since each children was eager to do the job himself the teacher had to see that every child in the group had a chance to handle the balance while others were piling seeds or pebbles into the balance.

A few children were lagging behind others and the teacher had to motivate them providing necessary guidance and inducement.

At the end of each trial the children were asked to write down their results.

There was a general discussion about the progress of the activity in the last five minutes of the class. One child asked "teacher why do we need more seeds from the 'a' container than we need from the 'b' container to balance the match box?" The question was put to the whole group and they provided various answers which were promptly recognized by the teacher. The students came to the conclusion that since seeds 'a' are smaller than seeds 'b' more seeds are required to counterbalance the match box. (This she said will lead the children to the idea of 'standard unit of weight.')

At the end each group was asked to pack the material and keep it in a corner of the classroom. All the student got up together and wished 'Ayabowan' (long live) to the teacher and she returned the same wish, and the class was adjourned.

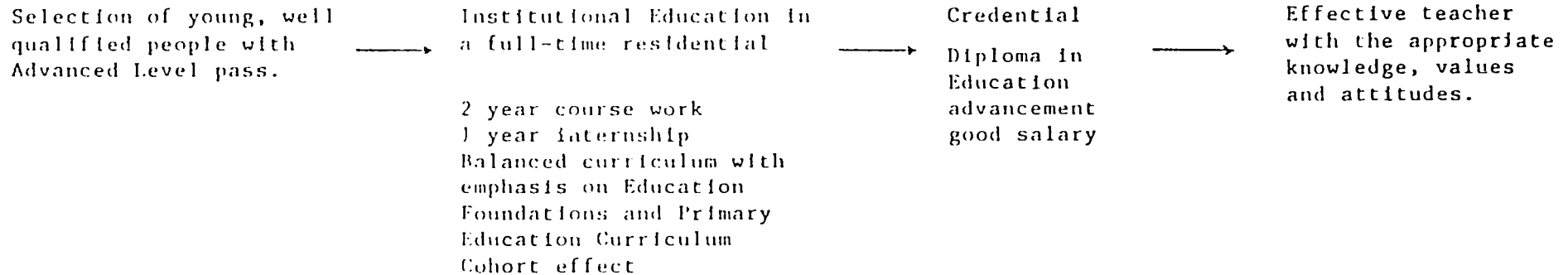
The presentation of the product portraying the image of the ideal teacher, rounds up the description of how the different approaches to teacher education

conceptualize the effective teacher. Although there was a unanimous response to the fact that the above description of the teacher in the classroom is the goal of the reform, the manner to achieve such a goal varies from approach to approach as discussed previously. The way the approaches go about educating their graduates to become effective teachers is dependent upon a series of assumptions held about the teaching methods, the learning opportunities, the curriculum, and other components required to improve the quality of the teacher. Figure 3 shows in a diagrammatic form the aims of the approaches and their different assumptions.

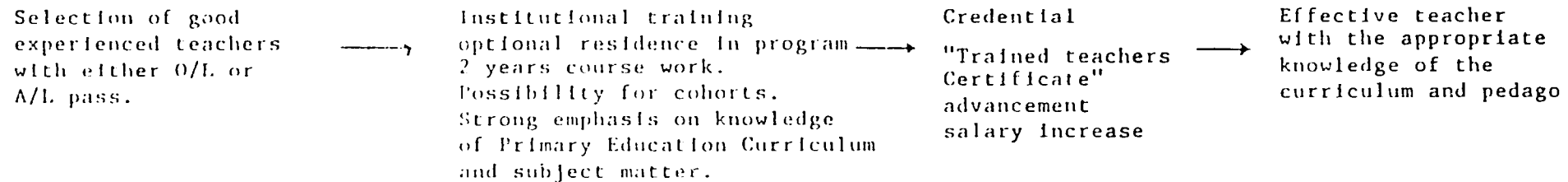
{Include Figure 3 "Different Approaches of Teacher Education in Sri Lanka" about here}

DIFFERENT APPROACHES OF TEACHER EDUCATION PROGRAMS IN SRI LANKA

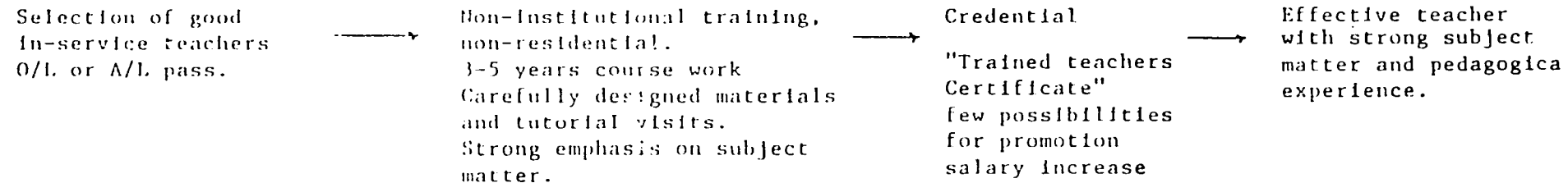
COLLEGES OF EDUCATION: Opportunity to mold character and attitudes.



TEACHERS COLLEGES: Experienced teachers take more advantage of training.



DISTANCE EDUCATION: Learn at own pace and they apply while learning.



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The views of teacher educators and program directors

It was considered important for this study to gain insight about the approaches and program implementation from those who work more closely in the different teacher education programs studied. Briefly stated here are the views of teacher educators and program directors about program implementation (for ease of reference this section refers to faculty or to the program as a way of encompassing both faculty and program directors). The complete summary of the interviews can be found in Appendix #.

The effects of the national reform in education and the consequent push from the government to require teachers to receive teacher education training have had their effects on all the approaches studied. The interviews with the faculty and directors should be understood under the context of this educational reform. The questions asked to both groups evolve around the underlying ideas guiding program goals and structure, and views about teaching and learning to teach.

A common trend is found among the three different approaches with respect to how they decide what they consider to be relevant to teach teachers. The main criteria evolves around official statements set by the government specifically by the Ministry of Education, and on the other hand by the examinations that these teachers have to pass. In addition, current research in teacher education seems to inform teacher educators about the content and character of their teaching. College of Education and Distance Education faculty seem to relay more on their peers to decide what to teach than their counterparts in Teacher Colleges.

Research in teacher education points out that unless teachers can learn new and innovative teaching techniques and strategies in their teacher education programs, teacher performance once in the classroom is more likely to resemble the way these teachers have been taught. Similarly, if during their teacher education programs teachers are asked to use innovative ways to instruct but they are taught only through lectures it is difficult to expect the use of other techniques but lecturing once they are in their classroom. The same is true about the use of materials in the classroom and other strategies. In the three approaches studied the more favored actions by the teacher in the classroom were ability grouping, design and use of instructional materials, teacher expectations and the role they play in students achievement, classroom management, emphasis in punctuality, setting instructional goals, and involvement in community activities. Less favored were the use of textbooks, and homework assignments.

Expectations from teachers from the moment they are in their training programs are very high. Faculty in all the three programs expect their teachers to participate in community (Shramadana), religious, and cultural activities. In addition they are also expected to negotiate for material, financial, and school facilities, as well as educate parents, adults, and early school leavers in the community. Since there are so many expectations the interview asked about the overall purpose of the program. In general the programs agree that their purpose is to teach general skills, knowledge, and pedagogical skills needed to teach primary school. More specifically teacher college faculty considers their most important goal to provide teachers with context relevant teaching techniques that will allow their students to teach successfully. College of education faculty considers an important goal fulfilling the country needs for qualified teachers, and Distance education faculty considers updating

knowledge of pedagogical techniques and teaching methods as most important. The way these programs try to accomplish these goals is through a carefully designed curriculum, supervised practice, excellent faculty, preparation in subject matter, and by encouraging the development of personal skills and attitudes appropriate for teaching. In the area of recruitment Colleges of Education faculty admitted having a more exclusive policy than teacher colleges and distance education. The general perception of the faculty is that their program is successful. The reasons for success are placed more in the quality of the program such as well defined goals, program' prestige, and the program faculty, than in the financial or other type of resources available to the program. Teacher college faculty expressed dissatisfaction with the levels of financial, material, and political support received, because of these deficiencies it is difficult for the program to keep up with the latest research in the field about effective teachers (funds for Teacher Colleges and Colleges of Education come from the Ministry of Education, funds for Distance Education comes from the National Institute of Education and foreign aid).

When asked about what factors work against attainment of programs goals, Teacher College faculty consider the quality of the students teacher , the lack of supervised practice and other similar learning opportunities for the students, and distance and other environmental situations as the most important factors. Colleges of Education faculty considers bureaucracy, excessive paper work that distracts them from the focus of the curriculum and instruction, and lack of resources as the most important factors. Distance education faculty considers lack of resources, and lack of supervised practice and similar learning opportunities as problematic.

When asked what would they add to their programs, faculty from Teacher colleges and Colleges of education would add field trips to acquaint students

with the communities they will be working in, and Distance education would add supervised classroom practice, method courses, research on teaching and learning courses, and field trips to the schools. The programs in general would like to have more books and have enough resources to organize symposia and conferences.

When asked why students select the program, Teacher College considers the diploma provided by the program as important. Colleges of Education said the program is the only option available to the students, and Distance Education considers low cost as most important.

Among the experiences that faculty recommends for the students Teachers Colleges faculty recommends volunteer work in schools, Colleges of Education recommends field experience to understand the needs of the communities, and Distance Education recommends observations by fellow teachers as important experiences for teachers.

Concerning the specific goals for the teachers, all the programs agree in helping teachers understand how children learn, how can they use research findings in improving their teaching, and to help organize their classroom to stimulate learning as the most important goals.

When asked about the methods of assessment used to determine if teachers have mastered the necessary knowledge and skills all three programs agreed that requiring an examination at the end of the program and observing the teacher teach are most frequently used method.

Finally faculty were asked about the type of teacher they would like to see graduate from their program, teacher college faculty thinks that teachers who understand both the theory and practice of teaching as important. College of Education considers teachers who understand both the theory and practice of teaching, teachers who have a strong sense of professionalism, and teachers who

are responsive to the needs of their students as important. Distance Education considers teachers who are able to perform the various tasks of teaching, and teachers who are able to evaluate their own teaching as most important. Most of the faculty believes that long hours of study and practice is what makes a difference in the type of teacher who will graduate from the program.

Theoretical and practical formal training, years of experience in teaching, the models presented to them, and interaction with other teachers about how to improve their teaching were also mentioned as important.

Concerning the most important thing that prospective teachers need to know, teacher college faculty believe that good classroom management skills, master of subject matter that is taught at the elementary level, be well informed of the new knowledge produced by research about teaching and learning, and be willing to try different pedagogical strategies to make the students understand and learn. College of education considers the willingness to try different pedagogical strategies as most important, and Distance education believes that understanding of children needs and abilities is the most important thing that teachers need to know.

From these views presented by the faculty and directors, it is possible to deduce that:

- o The teacher education approaches are mostly and foremost responsive to government mandates.

- o Traditional forms of evaluating mastery are dominant in the programs such as examinations and observation of teachers by faculty.

- o Programs do have specific views about what is important for a teacher to do in the classroom. The weak support for the use of textbooks and homework assignment may be reflected in the emphasis graduates from these programs put in using books and the role of homework in student learning once in the classroom.

o The lack of resources is an evident impediment for an effective program and Teacher Colleges seem to be the most affected.

o The demands on teachers in the field are reflected in these programs, and among all of these expectations time to think and reflect about teacher's own teaching seems to be constantly absent.

o The image of the graduate from these programs evolves around the idea of a close relationship between theory and practice, the teacher as a professional, and as having a good understanding of how children learn.

o Only in the newest programs, Colleges of Education and Distance Education, faculty seem to have the position to make decisions about what to teach as well as access to current research on teaching and learning.

These insights into the operation of the teacher education programs studied adds to the knowledge of the program based mostly in documents presented above. Teacher Colleges in general seem to contrast with Colleges of Education and Distance Education approaches in terms of level of funding, innovative methods, strategies, and materials for teaching. It is expected that these contrasts will also be present in the achievement and performance of the graduates from these programs.

Conclusions

One of the most important instruments of the educational reform for achieving the purposes of an educated work force, national unity, quality education for both pupils and teachers, are teacher education programs in their diverse modalities. Thus teacher education is expected to develop mechanisms to attract qualified people to the teaching profession, retain qualified teachers, specially in those areas in need of good teachers, improve the economic,

professional, and academic status of the teacher, provide an adequate supply of well trained and qualified teachers in order to improve the overall quality of the educational system. The assumptions held by these approaches and the mechanisms developed to carry out their goals determines the extent to which these innovations may be able to achieve a better status for the teacher and as a consequence contribute towards improving the quality of schooling in Sri Lanka.

After discussing the preliminary results of this research, it can be concluded with some degree of certainty that the basic orientation of teacher education in Sri Lanka is on learning the curriculum of primary education and how to correctly apply it within the guidelines stipulated by the State.

The assumptions of how an individual becomes an effective teacher in Sri Lanka in the context of the current educational reforms, includes the possibility for receiving formal training, possibilities for promotion, and the individual characteristics of the teachers or teacher candidates. An analysis of the models behind each program may help to understand the image of an effective teacher in the Sri Lankan context.

The model behind teacher colleges is that experienced teachers could be more effective if they receive formal teacher education based on pedagogy and skills mostly directed at how to teach the pre-designed curriculum given to them, and if they have possibilities for advancement and promotion which are given through the credential obtained when they finish their program. The assumption behind this model is that experienced teachers who are already committed to teaching will take more advantage of the training, and providing avenues for promotion will encourage them to continue teaching.

The model behind the Colleges of education depends on attracting capable individuals at the beginning of their careers and provide them with formal

teacher education with an emphasis on a diversified curriculum stressing co-curricular activities, pedagogical knowledge and practice. Included in this model is a different approach to educate teachers and an attempt to encourage critical thinking within the framework of the State. The program purposes to form a critical mass of well educated teachers who will know how to apply the curriculum and the subject matter they have been taught and who have good possibilities to become educational leaders. They also have good possibilities for advancement and promotion. The most important concept behind this model is the opportunity for this program to mold character and attitudes.

The distance education model relies heavily in materials with an emphasis on subject matter and in the teacher as an individual learner. Pedagogical knowledge is something that the teacher is supposed to possess as result of their teaching experience and a skill they will be able to perfect as they move along the training program. The model could be described as "applying while learning" based strategy. The possibilities for promotion or for developing close ties with other teachers are more rare here than in the other two programs as well as the possibilities for advancement and promotion.

From these models, it is possible to deduce that an effective teacher in Sri Lanka is an individual committed to the teaching profession, with experience in co-curricular activities, with subject matter knowledge, who knows how to apply a pre-designed curriculum, and who is expected to be a good fit for the school in which they finally teach.

Footnotes

- 1 The background information on teacher education is based on a synthesis of the literature written by K.H. Dharmadasa in 1988 for the Sri Lanka BRIDGES project.
- 2 Sri Lanka Ministry of Education (1982) Towards Relevance in Education. Report of the Education Reforms Committee-1979. Colombo: Department of Government Printing, Sri Lanka (p. 88).
- 3 Ibid., p.88.
- 4 Sri Lanka, Ministry of Education (Op. Cit)
- 5 With the democratization of schooling, enrolments at all levels in the school system rose very rapidly. The school going population (as a percentage of the total population) rose from 13 in 1943 to 18 in 1950. It is 21.7 percent as of 1981. (Sri Lanka Ministry of Education (1981) Education Proposals for Reform, p. i)
- 6 The latter requirement has now been elevated to a minimum of three subjects at the G.C.E. (A/L) examination.
- 7 Information provided in an interview by ADT1.2 (8/88), Maharagama, Sri Lanka.
- 8 Information provided in an interview with ADT1.1 6/88 Bolawalana, Sri Lanka.
- 9 The teacher educators are classified as Instructors and as Lecturers. The Instructors hold a Teacher Diploma and teach subjects such as Agriculture, Home Economics, etc. The Lecturers hold a post-graduate Diploma in Education and teach mostly subject matter courses such as Mathematics, Mother Tongue, Foundations and Methods courses.
- 10 Sri Lanka Ministry of Education (Op. Cit) pp.110-114.
- 11 Sri Lanka Ministry of Education (1981) Education Proposals for Reform, Colombo, Sri Lanka p. i.
- 12 Samarakoon, L.B. and Mrs. G.V.S.S. Rajapakse (1985) "Reforms in Teacher Evaluation to Enhance Morale and Motivation: An Experiment of A Sri Lankan Regional Education Department." Paris: Unit for Co-operation with UNICEF and WFP, UNESCO.
- 13 Sri Lanka Ministry of Education (Op. Cit) pp. 89-91.
- 14 In Sri Lanka the teacher's professional advancement as regards certification rests entirely with the State.
- 15 Dharmadasa, K.H. (1988) "Review of Literature on Teacher Education in Sri Lanka," Maharagama: National Institute of Education-BRIDGES Project, Sri Lanka.
- 16 Interview with the Director of the NIE 9/88 about the implementation of the Distance Education approach.

- 17 Sri Lanka Ministry of Education (Op. Cit.) p. 97.
- 18 Sri Lanka Ministry of Education, (Op. Cit.) pp. 97.
- 19 Sri Lanka Ministry of Education (Op. Cit.) p. 98.
- 20 Karunaratne, S. (1985) The role of distance education in teacher training. MEd thesis, Bristol, U.K.: Department of Education, University of Bristol.
- 21 Distance education training can be extended to a maximum of five years.
- 22 Wickramasinghe, Ranil (1985) Ministry of Education, Recommendations For Quality Improvement of Teacher Education in Sri Lanka, (mimeo).
- 23 The total duration of the programs is for teachers' Colleges of 2 years with 2620 clock hour of course work; the Colleges of Education with a duration of 3 years including 1 year internship and total clock hours of course work is 2730; and the Distance Education approach which duration is regularly 3 years but can be extended to 5. The study hours per week in this approach is 8 in average and a total of 105 modules or study units.
- 24 Sri Lanka Ministry of Education (1981) Education Proposals for Reform, Colombo, Sri Lanka p. 7.
- 25 Interview with AD2T and LLT, September 1988. Maharagama, Sri Lanka.
- 26 Interview with AD3D, June and September 1988. Maharagama, Sri Lanka.
- 27 Dharmadasa, K.H. (1988) (Op. Cit.)
- 28 Samarakoon, L.B. and Mrs. G.V.S.S. Rajapakse (1985) "Reforms in Teacher Evaluation to Enhance Morale and Motivation: An Experiment of A Sri Lankan Regional Education Department," Paris: Unit for Co-operation with UNICEF and WFP, UNESCO.
- 29 Samarakoon, L.B. (Op. Cit). Interviews with AD1T, AD2E, AD3D, September 1988, Maharagama, Sri Lanka.
- 30 One of the changes brought about by the education reform is the new system of years rather than grades in primary education; thus year three is equivalent to grade two of the old organization.
- 31 Interview with Mrs. K.G. de Mel and Mr. Piadasa. September 1988, NIE Maharagama, Sri Lanka. Teacher Education Workshop.

VI. RESEARCH RESULTS

VI.1 TEACHER ACHIEVEMENT, CLASSROOM PERFORMANCE, AND PUPIL
ACHIEVEMENT IN THE THREE TEACHER EDUCATION APPROACHES

VI.2 COSTS OF THE THREE APPROACHES

VI.3 TEACHER MOTIVATION

Research Results

A. Results of the effectiveness study.

The term effective is defined by The Random House Dictionary of the English Language (1987) as "[t]hat which has the power to, or which actually does produce an effect." More specifically, something that is effective is seen as "[a]dequate to accomplish a purpose producing the intended or expected result (i.e. effective teaching methods)..." And, "[e]ffect is something that is produced by an agency or cause..."

In all of these commonly used definitions of effectiveness implied is a sense of purposefulness. In other words, something has been designed to be effective and it is expected to have specific pre-designed results. When talking about policy and programs designed to address social/educational issues, the urgency for these policies or programs to achieve the intended effects for which they were designed is heightened by social, economic, and political demands.

In Sri Lanka, the creation of programs to educate teachers obeys to specific reasons, has pre-specified goals, and expects to achieve certain results. Teachers receive training under the assumption that better educated teachers will have better possibilities to understand the materials they read, to make informed choices about curriculum, and to have a large body of knowledge that will be helpful when teaching pupils. In addition to be concerned about knowledge of subject matter teacher education programs are concerned with pedagogy. The assumption is that teachers need to know not only what to teach but how to teach it. A broader social goal that teacher education programs pursue is improved learning, and educational achievement on the general population that will eventually bring about a productive, responsible, and well educated citizenry. Whereas teacher education programs have an

immediate goal: to increase knowledge, skills, and dispositions of those to teachers to be, they also have long term goals, such as producing teachers that are effective in the classroom, and who can favorably impact pupil's learning.

In the present study, effectiveness was conceived as the capacity of teacher education programs to provide teachers with the knowledge, skills, and attitudes that will allow them to become effective classroom teachers. Effectiveness in the classroom was defined as the ability by the teacher to structure a learning environment that will propitiate learning and increase pupil's achievement.

Effectiveness was measured as teacher achievement in terms of knowledge, skills and attitudes. In terms of pedagogy as the teacher behavior observed in the classroom. And in terms of the impact that these programs have on student learning. Since there are many areas in which a teacher is expected to have expertise, the subjects of Mathematics and Mother Tongue were selected because of the importance that these subjects have on Sri Lankan educational goals.

This chapter has two sections. The first section presents the results of the achievement test on the teachers. The second section presents the results of the observations of the teachers in the classroom, and the results of the pupil's achievement tests.

Measuring Effectiveness on teacher achievement.

One measure of teacher education effectiveness is the level of achievement reached by the teacher education candidates after they have finished the program, and how much of what it was learned stays with them when they go into the classroom and start teaching.

Rarely have studies of teacher education, specially in developing countries, considered teacher learning and achievement while in training, an important factor in the subsequent success of the teacher in the classroom and on the pupils themselves. More studies however, when trying to find explanations and programmatic answers as to what makes a teacher effective, they turn to the content of the teacher training for an answer. Understanding what type of curriculum, learning strategies, and learning philosophy teachers are exposed to may help explain why some teacher programs or techniques seem to produce more effective teachers than others, and may serve to improve already existing options.

The best way to measure achievement is the study of a group of students overtime. This allows the researcher to talk about changes in mean scores in specific achievement outcomes. In the present study, however, time limitations made it impossible to carry out a longitudinal study. Instead the study's design was developed so that it allowed the measurement at three points in time of three similar groups of people within the programs. The comparison across programs was possible because they pursue the same outcomes. This is, teacher education programs in Sri Lanka expect their teachers to achieve to an specific level in the knowledge and skills of teaching as well as in the attitudes that they need to be successful in their profession. Caution should be exercised when interpreting the results through time since it is not the same people measured at every point.

As a way of controlling for differences across groups, the study controlled for the following background variables: gender, age, highest educational qualification possessed before entering the training program, and for teaching experience before entering the training program. Although socioeconomic status is considered a very important variable, NIE researchers refused to ask the

question since it is considered by teachers as very sensitive; the same was true for ethnic group (all of the respondents however were Senhalese).

Table 1 shows the results of the outcome measures -knowledge, skills, and attitudes- in the three programs by wave (entrance, exit, and classroom teaching).

Table 1. Mean scores and standard deviations for teacher program's effectiveness measures of knowledge, skills, and attitudes, by program and wave. The actual means have been converted to standardized scores.

Program	Wave	n	Math know. mean (sd)	Lang know. mean (sd)	Math skills mean (sd)	Lang skills mean (sd)	Attitudes mean (sd)
College of Education							
	1	100	-.028 (.758)	-.118 (.815)	-.820 (.743)	-.797 (.779)	.478 (.713)
	2	86	.462 (.899)	-.119 (1.03)	.123 (.788)	.126 (.652)	.336 (.783)
	3	36	.368 (.996)	.158 (.860)	.432 (1.14)	.405 (.891)	-.847 (.499)
Teachers College							
	1	92	-.278 (.939)	.110 (.924)	.076 (.931)	-.313 (.793)	.320 (.911)
	2	78	-.010 (1.15)	.103 (.997)	.076 (1.01)	.504 (.981)	.365 (.984)
	3	38	.053 (1.10)	.168 (1.13)	.206 (.851)	.280 (.938)	-.884 (.691)
Distance Education							
	1	24	-.307 (.831)	-.290 (.691)	.092 (.853)	-.150 (.716)	-.534 (.602)
	2	73	.019 (.930)	.273 (.986)	.396 (1.01)	.611 (.803)	.559 (.671)
	3	43	-.279 (.776)	-.262 (.932)	.203 (.986)	.380 (.953)	-.891 (.791)

In addition to computing the means and standard deviations for each one of the achievement measures by programs, the analysis of the data was done using multi-analysis of variance (procedure MANOVA in SPSSx) with contrasts to test the hypothesis of program and time having an effect on teacher's learning.

The general hypotheses being tested are directed to finding out whether the student/teachers in the programs seem to have different levels of achievement and whether this difference is constant over time. The specific hypothesis follow:

- (1) Pre-service programs are compared against in-service program and the hypothesis is that Pre-service teacher candidates score significantly higher than their counterparts in the in-service programs (Teacher Colleges and Distance Education).
- (2) In-service programs, this is, teachers colleges versus distance education are compared with each other to test for the superiority of one over the other. The hypothesis is that teacher colleges score higher than distance education.
- (3) The different groups measured at the points of entrance, exit and classroom teaching are compared. The hypothesis is that the relationship between one point and the other is continuous and linear.
- (4) The different groups measured at the points of entrance, exit and classroom teaching are compared. The hypothesis is that the relationship between one point and the other is quadratic, this is, presents a "fade out effect" of the program on learning or attitudes.
- (5) Pre-service versus in-service programs are compared against each other over time. The hypothesis is that the Pre-service programs' student/teachers show a positive linear constant trend over time that contrast with the negative linear constant effect of those in in-service programs.
- (6) Pre-service versus in-service programs are compared against each other over time. The hypothesis is that the Pre-service programs' teacher candidates show a quadratic or "fade out" effect trend over time. Pre-service program teacher candidates are expected to show a higher or positive level of performance than their counterparts in in-service programs. This is, in-service programs would

seem to "unlearn" as they move through the program and improve as they move out.

(7) In-service programs are compared against each other over time. The hypothesis is that teachers' colleges teacher candidates show a linear constant trend over time whereas distance education show a negative linear trend for the program over time, this is, their achievement would seem to constantly get worse as they move through the program.

(8) In-service programs are compared against each other over time. The hypothesis is that teacher's colleges students/teachers show a quadratic or "fade out" effect trend over time. Distance education is expected to show a quadratic distribution as well but negative to that of teachers colleges, this is, they would seem to "unlearn" as they move through the program and improve as they move out.

Table 2. Multi-analysis of variance coefficients and tests of significance for testing the hypothesis of program effectiveness overtime (using Z scores).

Parameter	Coefficient	Error	t-Value	Sig of t
<u>Mathematics Knowledge:</u>				
<u>Program (d.f.=2)</u>				
In-service vs Pre-service	.33460	.089	3.75	.000
Teachers C. vs Distance E.	.13755	.110	1.24	.213
<u>Wave (d.f.=2)</u>				
Linear trend over time	.30666	.115	2.65	.008
Quadratic trend over time	.53098	.166	3.18	.001
<u>Program by wave (d.f.=4)</u>				
(Inserv vs preserv)xlinear	.24445	.232	1.05	.292
(Inserv vs preserv)xquadr.	.11408	.340	.334	.737
(Teacher C. vs Dist)xlinear	.23857	.294	.808	.419
(Teacher C. vs Dist)xquadr.	-.40564	.420	-.96	.335
<u>Language Knowledge:</u>				
<u>Program (d.f.=2)</u>				
In-service vs Pre-service	-.04355	.089	-.48	.627
Teachers C. vs Distance E.	.21997	.113	1.94	.052
<u>Wave (d.f.=2)</u>				
Linear trend over time	.12072	.117	1.02	.305
Quadratic trend over time	.25012	.170	1.46	.142
<u>Program by wave (d.f.=4)</u>				
(Inserv vs preserv)xlinear	.23323	.236	.98	.324
(Inserv vs preserv)xquadr.	-.79121	.348	-2.27	.023
(Teacher C. vs Dist)xlinear	.02882	.302	.09	.924
(Teacher C. vs Dist)xquadr.	-1.1698	.431	-2.70	.006
<u>Mathematics Skills:</u>				
<u>Program (d.f.=2)</u>				
In-service vs Pre-service	-.46392	.146	-3.17	.001
Teachers C. vs Distance E.	-.11848	.108	-1.08	.277
<u>Wave (d.f.=2)</u>				
Linear trend over time	.58834	.123	4.77	.000
Quadratic trend over time	.34797	.167	2.08	.037
<u>Program by wave (d.f.=4)</u>				
(Inserv vs preserv)xlinear	1.1750	.228	5.13	.000
(Inserv vs preserv)xquadr.	.43854	.335	1.30	.192
(Teacher C. vs Dist)xlinear	-.03305	.293	-.11	.910
(Teacher C. vs Dist)xquadr.	-.69365	.415	-1.66	.095
<u>Mother Tongue Skills:</u>				
<u>Program (d.f.=2)</u>				
In-service vs Pre-service	-.51904	.132	-3.93	.000
Teachers C. vs Distance E.	-.11903	.099	-1.20	.230
<u>Wave (d.f.=2)</u>				
Linear trend over time	.86233	.112	7.69	.000
Quadratic trend over time	.94263	.151	6.23	.000
<u>Program by wave (d.f.=4)</u>				
(Inserv vs preserv)xlinear	.64954	.208	3.12	.001
(Inserv vs preserv)xquadr	-.36113	.305	-1.18	.238
(Teacher C. vs Dist)xlinear	-.00515	.267	-.01	.984
(Teacher C. vs Dist)xquadr.	-.00010	.378	-.00	.999

Table 2. Multi-analysis of variance coefficients and tests of significance for testing the hypothesis of program effectiveness overtime (cont...).

Parameter	Coefficient	Error	t-Value	Sig of t
<u>Attitudes:</u>				
<u>Program (d.f. =2)</u>				
In-service vs Pre-service	-.02964	.126	-.23	.815
Teachers C. vs Distance E.	.21635	.094	2.28	.022
<u>Wave (d.f. =2)</u>				
Linear trend over time	-.89145	.106	-8.34	.000
Quadratic trend overtime	1.6569	.145	11.36	.000
<u>Program by wave (d.f. =4)</u>				
(Inserv vs preserv)xlinear	-.54062	.197	-2.73	.006
(Inserv vs preserv)xquadr	-.85044	.292	-2.90	.003
(Teacher C. vs Dist)xlinear	-.89927	.254	-3.53	.000
(Teacher C. vs Dist)xquadr.	-1.3137	.364	-3.60	.000

Differences across programs in the different achievement measures.

Mathematics knowledge. As it is possible to observe in Figure 1, the two in-service programs at the point of entrance to the program (or before training) scored very close to each other. We can assume that the level of knowledge of Mathematics of these two groups is quite similar before they enter the program. In contrast, the pre-service program seems to start at a higher point, this is they know more Mathematics than their counterparts before they start the program.

When looking at the group of students tested at the end of the program, it is possible to observe that there is an increase in the test score although again the increase is higher for the Colleges of Education. Finally when looking inside classrooms, the group of teachers measured in both in-service programs performed at a lower level than the pre-service program. However whereas the Teachers Colleges scores were very close to those at point two, in the Distance Education program the scores decreased significantly.

MATHEMATICS KNOWLEDGE

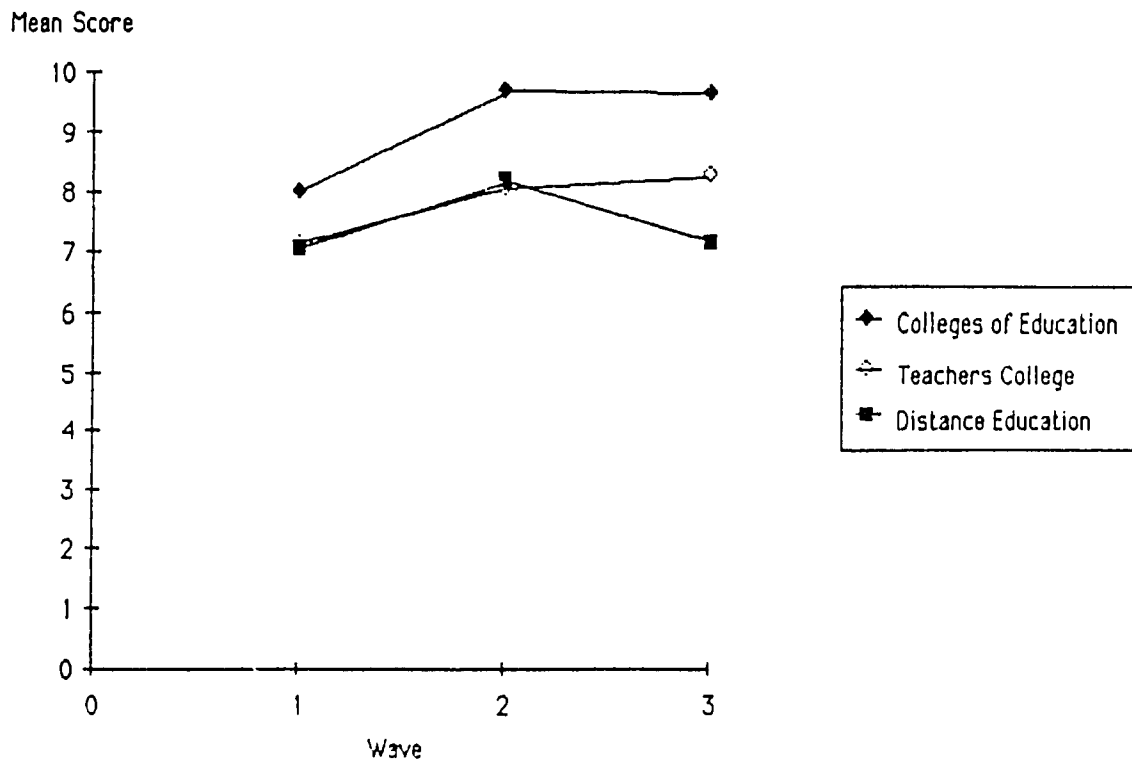


FIGURE 1

When using the multivariate analysis of variance to test program effects, a significant difference was found when comparing the pre-service program against the two in-service ones (t-value 3.75 $p < .000$). Such a finding indicates that the performance of the Colleges of Education at any point in time (before and after the program, and while in the classroom) seems to be significantly different from that of either Teachers Colleges and Distance Education in the level of Mathematics knowledge shown in the achievement tests.

When exploring the trend followed by the groups studied in the three points in time, our hypothesis of linearity, this is, the assumption that as the groups of students move through the program their knowledge should increase (or that they are learning) was confirmed (t-value 2.65, $p < .01$).

When exploring program and time effects, it is possible to appreciate in figure 1, the trend of a constant, continuous program effect seems to be true in the three programs for the points of entrance and exit from the program. In the point of classroom teaching, however, this is less true specially for those in the Distance Education group. Because of the patterns observed, the hypothesis of a quadratic distribution was also tested. The result of the test was significant (t-value 3.18, $p < .001$) confirming the presence of a fade out effect of each one of the programs.

The measures of mathematics knowledge are a composite of knowledge at the advanced and at the elementary level. Figure 1 also shows the performance of the students from the different programs. It is possible to observe that the colleges of education perform higher than their counterparts in this part of the test. Whereas all the programs seem to show a "fade out" effect, this is more pronounced for those in distance education.

Mathematics knowledge at the elementary level also shows the colleges of education students as having an overall higher achievement level than their

counterparts in the other programs. Teacher colleges students seems to have learn in a constant and linear fashion whereas both the colleges of education and distance education show a clear fade out effect.

Mother Tongue knowledge. In figure 2 the three programs at the point of entrance to the program (or before training) scored very close to each other. We can assume that the level of knowledge of Mother Tongue is quite similar before they enter the program, although Teachers College score higher than the other two pre-service and in-service programs.

When looking at the group of students tested at the end of the program, it is possible to notice a sharp increase for the group of graduates belonging to the Distance Education program, whereas the other two programs remain at the same level observed at the point of entrance. Finally when looking inside classrooms, the group of teachers measured in the Distance Education program drops significantly whereas both the Teachers College group and the Colleges of Education group, show an increase in their level of performance.

When using the multivariate analysis of variance to test program and time effects, a significant difference was found when comparing the performance of the pre-service program against the two in-service ones over a linear time distribution (t-value -2.27 p <.05). Such a finding indicates that the relationship between in-service and Pre-service programs overtime is opposite to the one predicted or hypothesized. Colleges of education and teacher colleges, seem to have a constant and continuous effect on learning. Contrary to the stated hypothesis (since t is negative) that sets apart the College of Education from in-service programs, the trend of the colleges of education is quite similar to that of the teacher's college although its performance is somewhat lower. In this case, its is the distance education program which shows

LANGUAGE KNOWLEDGE

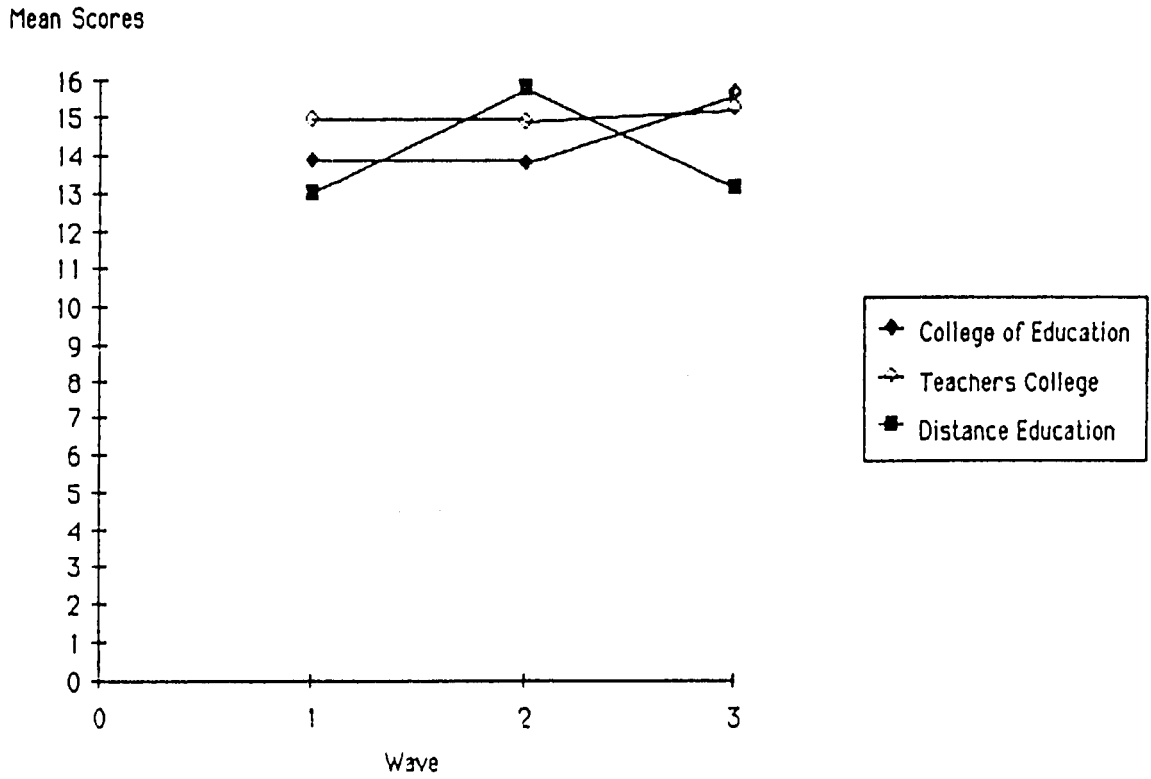


FIGURE 2

a significantly different trend over time than the other two programs. Distance education shows a quadratic distribution over time or a "fade out" effect of the program.

A significant difference was found when comparing the two in-service programs assuming a quadratic distribution (t-value -2.70, $p < .01$). The relationship between these two in-service programs is inverse to the one predicted. Whereas distance education follows a quadratic distribution or a "fade out" effect, teacher college follows a positive linear distribution.

In the case of Mother Tongue achievement level, the two institutionalized programs (teachers college and college of education) have a similar pattern of impact overtime versus their non-institutionalized -distance education- counterpart.

Mother Tongue knowledge test is a composite of knowledge at the advanced and the elementary level. At the advance level, Colleges of education seem to have a linear and constant effect of learning over time, distance education shows mostly a fade out effect as the students move through and out of the program. Teachers colleges' effects seem to show a "fade out" effect but in reverse; students seem to unlearn while they move to the program and regain the level they had before entering the program.

Language knowledge at the elementary level shows the college of education has a linear positive and constant effect on learning whereas both teachers colleges and distance education show a "fade out" effect.

Mathematics teaching skills. In figure 3, it is possible to observe the differences in the programs overtime in the student/teacher's achievement in mathematics skills. Both teacher colleges and distance education start the program at the same level of achievement, whereas colleges of education score

MATHEMATICS TEACHING SKILLS

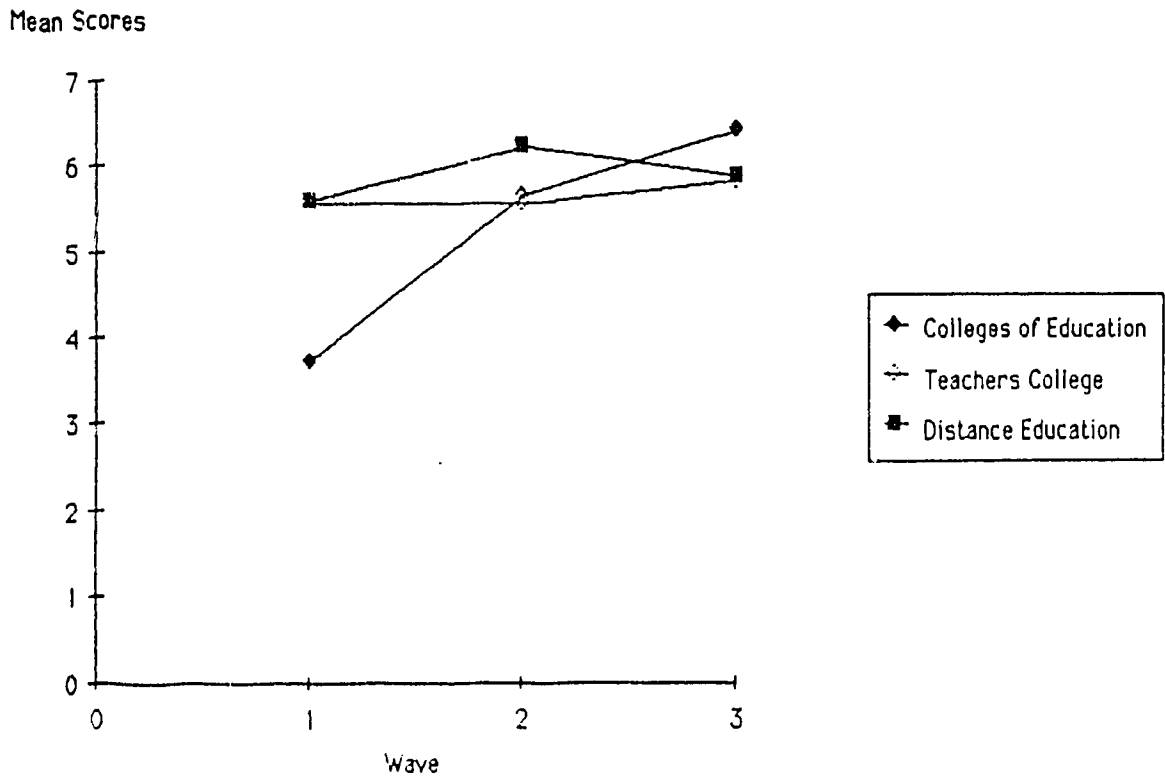


FIGURE 3

significantly lower than their counterparts. At the point of exit in the programs the group tested for colleges of education achieved at the same level that those in teachers colleges but both were at a lower level from their counterparts in distance education. At the point of teaching in the classroom, however, both teacher colleges and distance education achieve at the same point whereas college of education graduates score slightly higher.

When looking at the multi-analysis of variance to study program effects, a significant but negative t-value (-3.17, $p < .001$) indicates that contrary to our stated hypothesis, in-service programs seem to perform better overall in mathematics teaching skills than colleges of education.

When looking at the multi-analysis of variance to study program trends over time, a significant and positive t-value (4.77, $p < .000$), indicates that our hypothesis of linearity is confirmed and we can conclude that overall the three teacher education programs seem to have a linear positive effect on teaching mathematics skills.

A significant difference was found when comparing the two in-service programs assuming a quadratic distribution (t-value 2.08, $p < .05$). This relationship tell us that while there seems to be a linear trend this trend also shows a quadratic distribution or a "fade out" effect.

Finally when looking at the multi-analysis of variance to test program effects over time, a significant and positive t-value (5.13, $p < .000$), confirms the hypothesis that while Pre-service education follows a constant and linear trend overtime, the in-service programs show more of a "fade out" effect over time.

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Mother Tongue Teaching Skills. In figure 4 it is possible to see the performance on mother tongue skills that students/teachers from the different programs showed in achievement tests. The groups from teachers colleges and distance education measured at the point of entrance to the programs, showed a similar level of achievement whereas those from Colleges of Education achieved at a lower level. At the point of exit we see an increase in the level of performance in skills for all the groups. The student teachers from the teachers colleges and the distance education had a similar level of achievement; colleges of education increased their level of performance but they still remained at a lower level than their counterparts in the in-service programs. Finally at the point of classroom teaching, the three groups measured performed at a very similar level with the colleges of education scoring slightly higher than their counterparts in the in-service programs.

When looking at the multi-analysis of variance to test for program effects, a negative but significant t-value (-3.93, $p < .000$) indicates that the Pre-service program does in fact, perform differently from the in-service programs. However, contrary to the stated hypothesis the overall the performance of in-service programs is higher than the Pre-service program.

When examining the results of the analysis for effects over time, both hypothesis of linearity and quadratic are confirmed. The three programs show a continuous and positive trend through time (t-value 7.69, $p < .000$) which indicates that the performance in mother tongue teaching skills increase as the student/teachers move through the program and when they are in the classroom. A "fade out" effect, however, is also present (t-value 6.23, $p < .000$) in the three programs which indicates that most of the "gains" or learning occurs at the first two points of entrance and exit from the program and that after this

MOTHER TONGUE TEACHING SKILLS

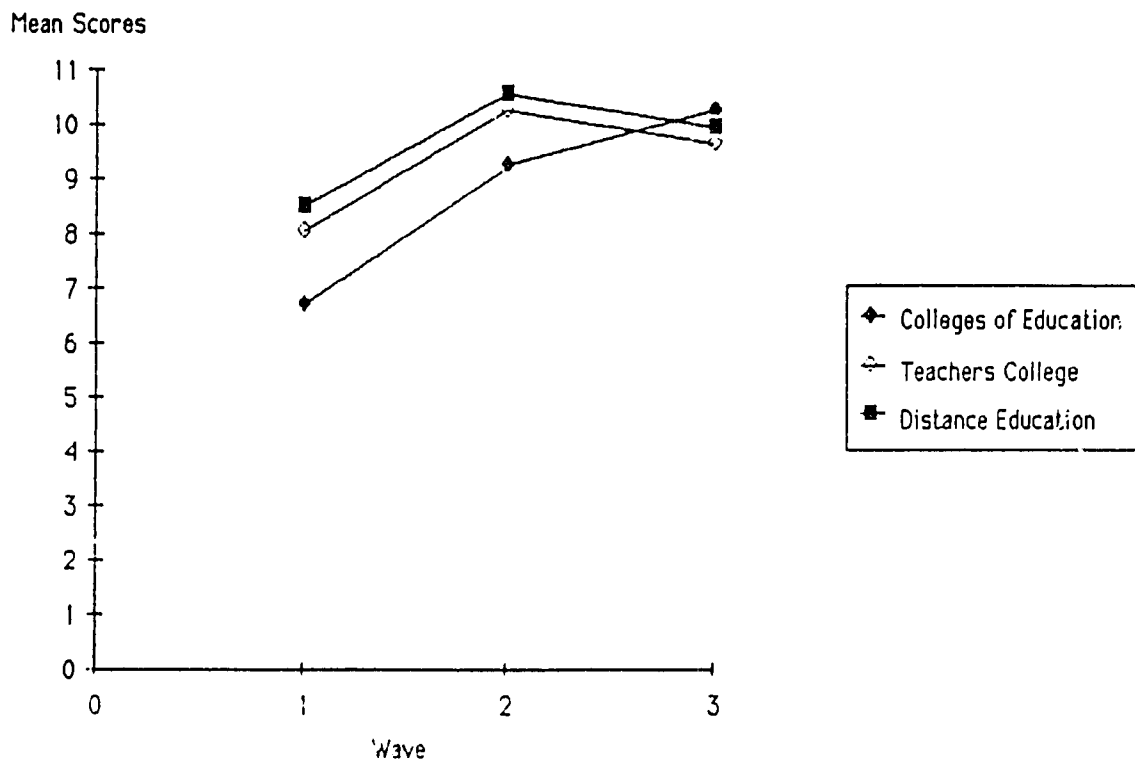


FIGURE 4

point when teachers go to the classroom, the learning of mother tongue teaching skills decreases.

The results of the analysis for examining program effects over time indicates that Pre-service training seems to have a linear constant positive effect on learning of mother tongue skills overtime over the in-service approaches and this effect is significant (t-value 3.12, $p < .001$).

Attitudes. In figure 5 it is possible to appreciate that the attitude expressed by the student/teachers in the programs is rather similar. Whereas Colleges of education and teacher colleges seem to start the program with a higher attitude level than when they finish, it seems that by the moment they go into the classrooms that attitude drops markedly. The student teachers in distance education start with a lower attitude level than their counterparts, going through the programs seems to improve it, but as the student teachers from the other two programs their attitude drops as they exit and move to the classroom. Attitudes as was previously explained, is a composite of attitudes towards the profession, the students and the community. As the figures 6, 7, and 8 show the most negatives attitudes are those expressed towards the community (specially once they are teaching in classrooms), and towards the profession. The more positive attitudes are those expressed towards the students, which except for those student/teachers in distance education, have a constant positive slope in the three points in time.

When looking at the multi-analysis of variance for examining program effects, a significant difference between the teacher colleges attitudes and distance education students attitudes is evident (t-value 2.28, $p < .05$). Specifically, distance education student/teachers have a lower level of

ATTITUDES

Mean Scores

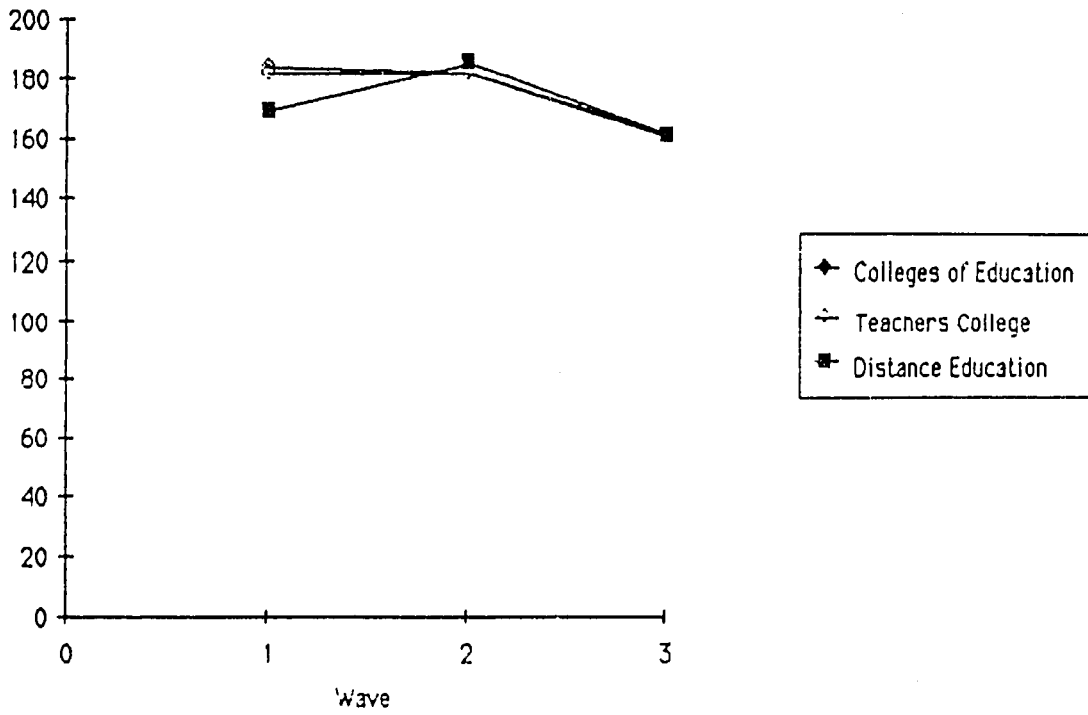


FIGURE 5

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ATTITUDES TOWARDS STUDENTS

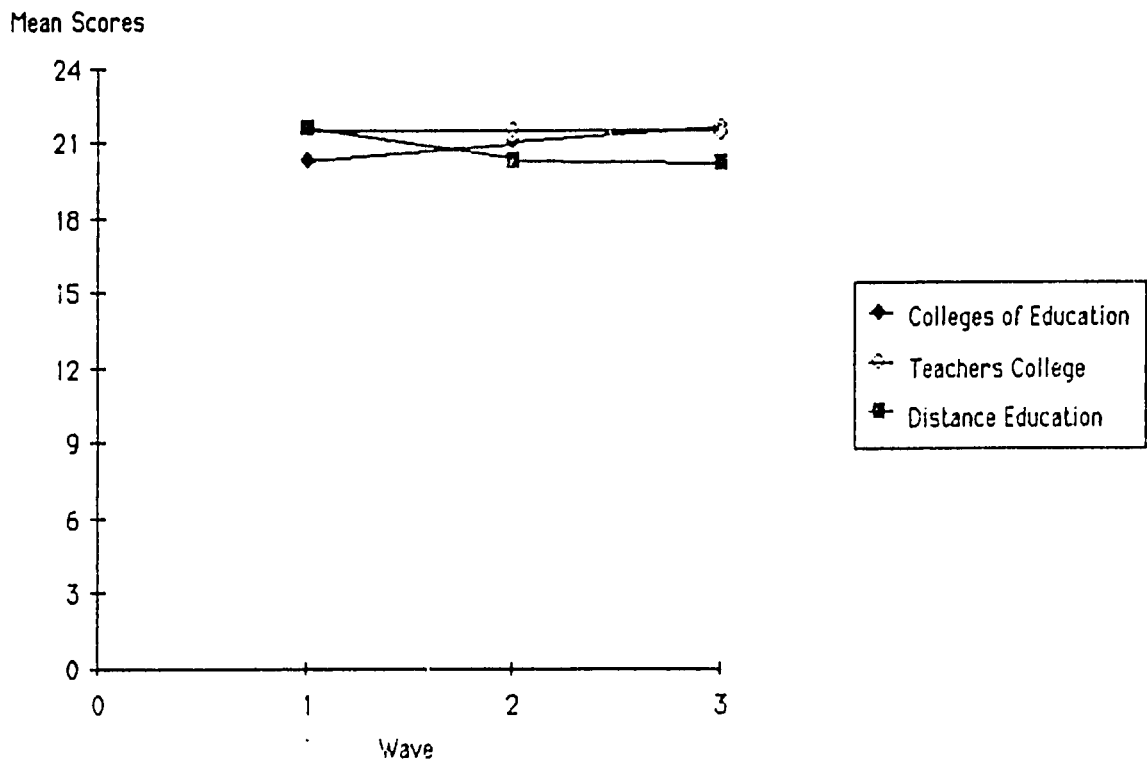


FIGURE 6

ATTITUDES TOWARDS THE PROFESSION

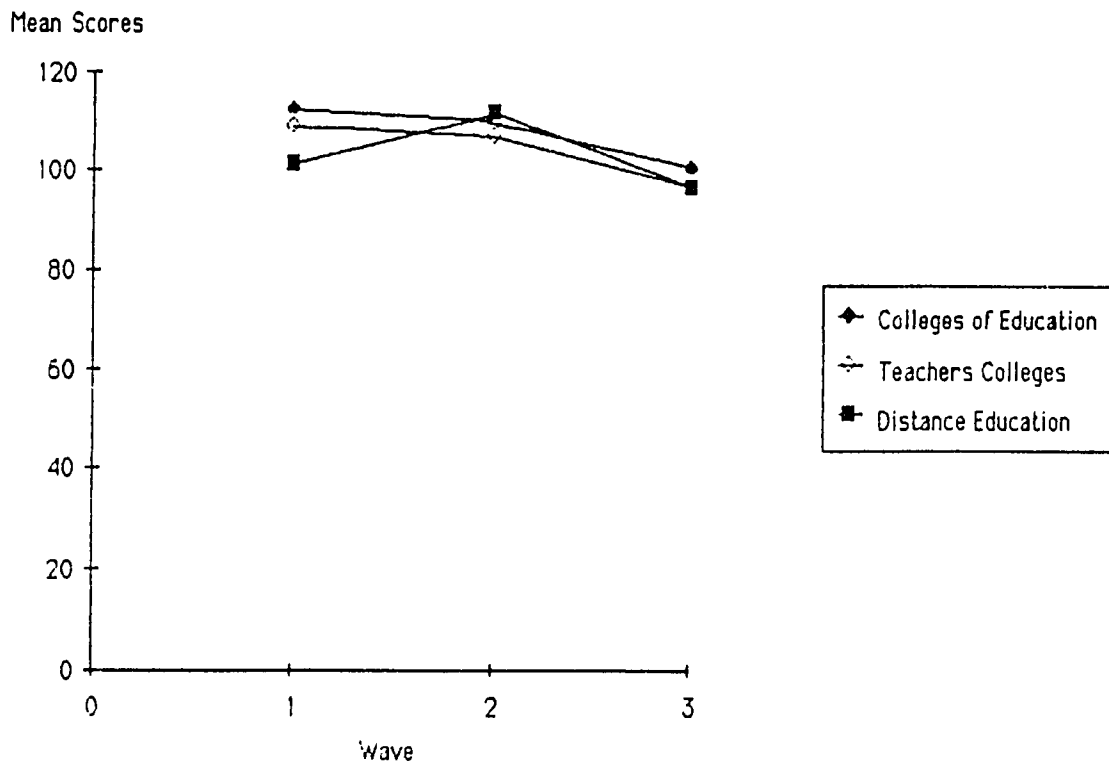


FIGURE 7

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ATTITUDES TOWARDS THE COMMUNITY

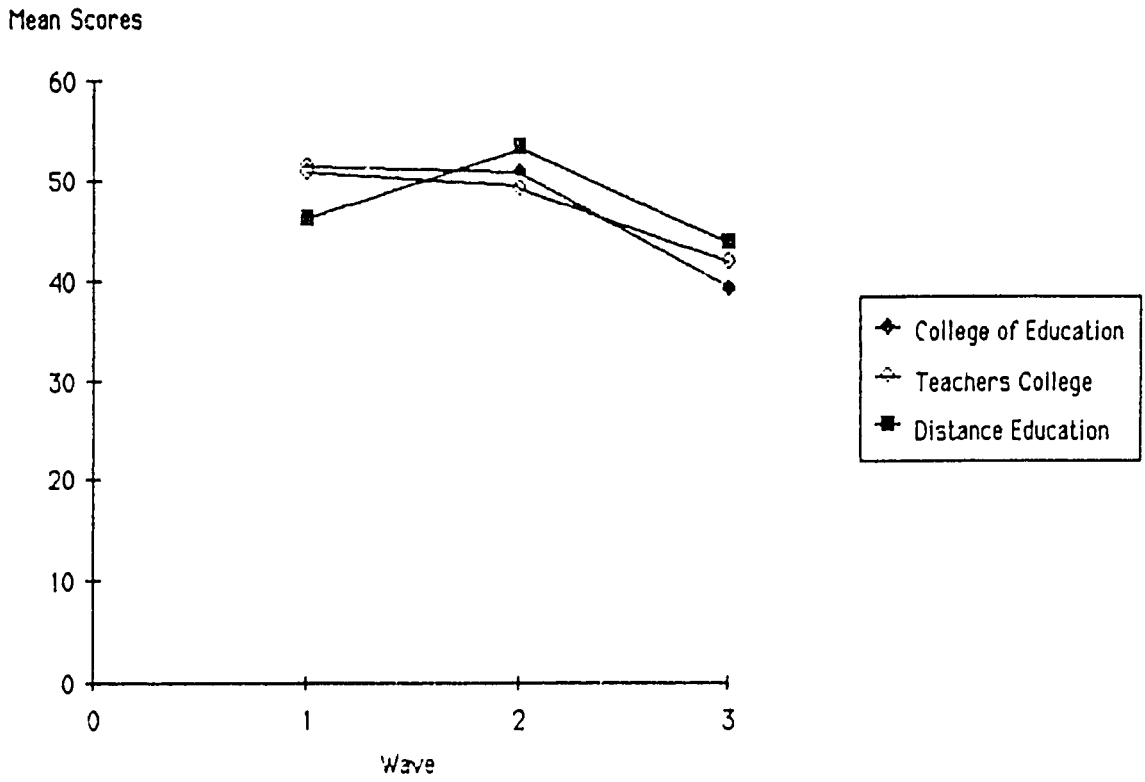


FIGURE 8

attitude overall than the teachers colleges. The Pre-service program does not show a significant difference against any of the two in-service programs.

When looking at the analysis of variance for time effects, it is possible to see that there is a negatively sloped linear distribution in the attitude of the three groups (t-value -8.34, $p < .000$). This is, they start the programs with higher levels of attitude than when they finish they and go to teach in classrooms. The hypothesis to test for a "fade out" effect was significant as well (t-value 11.36, $p < .000$) meaning that the student/teachers do show a fade out effect as they move through the program.

Finally, when looking at the multi-analysis of variance for examination of program and wave effects, the four predicted hypothesis are significant with negative t-values.

When comparing Pre-service versus in-service programs against each other over time, the Pre-service programs' student/teachers show a negative linear constant trend over time similar to that of those in in-service programs (t-value -2.73, $p < .01$).

When comparing Pre-service versus in-service programs against each other over time, the Pre-service programs' student/teachers show a quadratic or "fade out" effect trend over time. The same is true for their counterparts in in-service programs (t-value -2.90, $p < .005$).

When comparing in-service programs against each other over time, teachers' colleges student/teachers show a negative linear constant trend over time. The same is true for distance education, this is, both their attitudes would seem to constantly get worse as they move through and out of the program (t-value -3.53, $p < .000$).

Finally, when comparing in-service programs against each other over time, teachers colleges' students/teachers show a quadratic or "fade out" effect

trend over time. Distance education also shows, contrary to the stated hypothesis, a positive quadratic distribution as well (t-value -3.60, $p < .000$).

In general, graduates from Colleges of Education seem to show a monotonic improvement through time. Distance Education and Colleges of Education graduates seem to perform better in the measures of achievement, specially teaching skills, than their counterparts from teacher colleges or untrained teachers.

These results should be interpreted considering the limitations of the study. Although this is not a longitudinal design it does include comparable groups within the programs, the drop out rates are quite low for the three programs (CE and TC less than 5 percent, and DE less than 15 percent). For the purposes of the study the three programs are discussed simultaneously, however and very importantly, the results of this study also allows to consider the merits of each program in its own right.

Measuring Effectiveness on teacher performance.

Three different types of observations were carried out in the classrooms of trained teachers under the different approaches (colleges of education, teachers colleges, and distance education), untrained teachers were also observed at this point and their performance compared with those of the trained teachers. The three types of observations included general classroom observation, observations of instructional practices, and actual time of classroom activities.

The general contexts where teachers work.

The teachers observed in the study were deployed in different school types a distribution that it is important to consider when looking at the results of the study. The following table shows the distribution of the teachers by school type.

Table 3. Distribution of teachers by school type.

	n	Congenial %	Difficult %
College of Education	66	9	91
Teachers Colleges	82	63	37
Distance Education	100	60	40
Untrained Teachers	44	23	77

Accordingly, teachers held their classes in different types of classrooms. Eighty percent of all the teachers observed share the room with other classes. Only 17 percent of the teachers have a room for their class. The following table shows the distribution.

Table 4. Distribution of teachers by type of classroom.

	n	Room %	Part Room %	No shelter %	Other %
College of Education	61	11	85	2	2
Teachers Colleges	62	24	76	0	0
Distance Education	73	21	78	1	0
Untrained Teachers	17	0	88	6	6

The previous tables show that Colleges of Education graduates as well as untrained teachers work mostly in difficult schools a fact that may affect their classroom performance. Distance Education and Teacher College graduates work mostly in congenial schools a fact that is also expected to affect their performance. Similarly a larger percent of graduates from teacher Colleges and Distance Education work in single rooms versus sharing their classroom with other classes. All these conditions are expected to affect not only teacher performance but pupil achievement as well.

Resources, their availability and rate of use.

In the majority of the classrooms observed, teachers and students seem to have the basic resources to carry out the tasks of teaching and learning such as blackboards, teacher desks and chairs, students desks and chairs, etc. Classrooms were mostly lacking in charts, maps, globes and similar types of materials. During the visit to the schools the observer was expected to record whether specific resources were present, whether they seemed usable and whether they were used while the observer was in the classroom. Although the time the observer spend in the classroom was too short to draw any definitive conclusions from the results, they may be indicative of the general activities that the teacher follows day to day. Some trends of interest were observed. For example teachers seem to under utilize some of the resources that are provided by the Ministry of Education such as teaching kits, teacher guides, and student textbooks. Specifically for teaching kits the rate of utilization was in average 82 percent with College of Education graduates making the less use of the materials. Teacher guides' rate of utilization was of 60 percent in average with teacher colleges graduates making the less use of the guide. The

attendance register had a rate of utilization of 40 percent in average with untrained teachers making the less use of it. The scheme of curriculum and the syllabus has an utilization rate of 77 and 72 percent in average respectively for trained teachers. Untrained teachers show not use of these materials mostly because of their unavailability. The low use of student's texts is important to note, in average the utilization rate was 58 percent among trained teachers, and 28 percent among untrained teachers. (The utilization rate was computed by dividing the number of teachers who used the materials among the same number of teachers who had usable materials).

This finding may illustrate the findings of other research studies that show that teachers often time do not use available resources among these books because in their training programs they have been rarely taught how to use them.

Figure 9 shows the percentage of teachers observed using a variety of instructional materials in the days they were observed. In general teaching kits and textbooks are the less frequently used materials with College of Education and distance education graduates making more use of these than the other teacher observed. Charts and maps are more frequently used by CE and DE graduates as well probably because they have been taught how to make use of these materials during their training. The same is true for makeshift aids. The more frequently use instructional material is the blackboard which the teacher uses to write down exercised for the students or for explaining new concepts. The use of the blackboard usually takes more time for the teacher than if he or she uses the textbook that is sometimes available in the classroom.

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TEACHERS' USE OF INSTRUCTIONAL MATERIALS

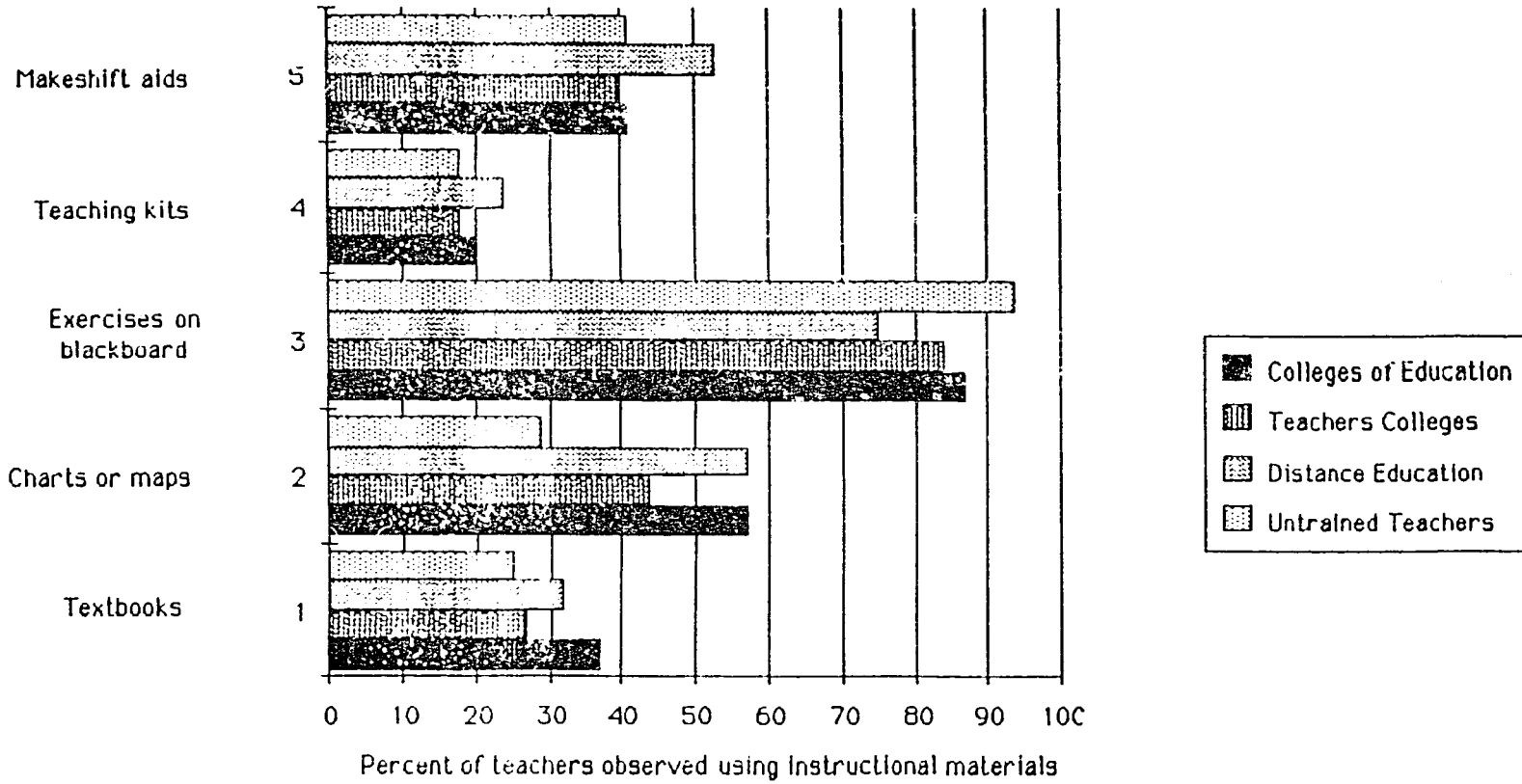


FIGURE 9

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Teacher classroom performance.

The observer was asked to rank the performance in a scale from 1 to 5 where 1 is unfavorable or low and 5 favorable or high, in terms of the following categories: ability in subject matter, making instruction interesting, clarity of explanation, enthusiasm for teaching, ability to help all children, adequacy of guided practice and of independent practice, adequacy of evaluation, feedback and correction style, discipline style, personality, fairness and discipline style, and teaching ability. All of these characteristics were used in a composite indicator for classroom performance. The results are presented in the table below. The Colleges of Education and the Distance Education graduates were seen as performing significantly better than their counterparts from teacher colleges or untrained teachers.

Table 5. Mean scores, standard deviations, and significance level for trained and untrained teachers' classroom performance as ranked by observers.

Program	n	mean	sd
Colleges of Education	61	64.19	8.8
Teachers Colleges	62	56.91	10.5
Distance Education	73	63.80	10.1
Untrained Teachers	17	52.70	11.7
F statistic	11.18*		

* Significant at the $p < .0000$ level

In the table above its is possible to see that the observers considered the performance of Colleges of education and Distance education graduates as

superior than that of teacher colleges and untrained teacher graduates, and that the difference is statistically significant. Figure 10 shows these results.

Teaching skills

Figure 11 shows the percentage of teachers observed making use of different teaching skills in their classrooms. As it is possible to see most of the teachers use the audio-lingual method or lecturing to conduct their classes. These teachers combine lecturing with other type of teaching strategies. Colleges of Education and Distance Education graduates were observed using with more frequency the less traditional methods in which the student is more an active participant in his/her own process of learning such as story telling, assignments, discovery, problem solving, discussions and observation. Teacher centered instruction seems to be more prevalent among those graduates of teacher colleges and untrained teachers. Other teacher-focused strategies such as recitation, and question-answer instruction are quite prevalent in the Sri Lankan context.

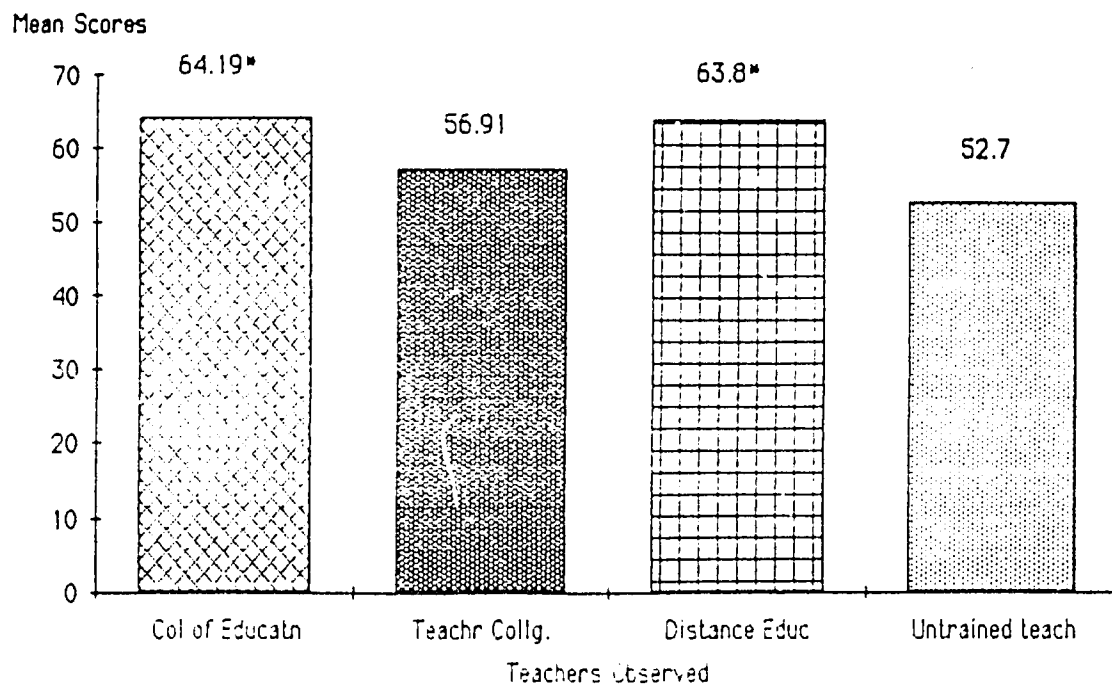
Instructional Practices

The performance of teachers in a number of areas considered relevant by the school effectiveness literature was observed. In the observation of instructional practices, the focus was on whether the teacher carried out an specific activity rather than on the time or the quality with which such activity was performed. The resulting means for each one of the activities measured are a composite of a series of observations that result in such

Teacher Classroom Performance

Teaching content

Teachers ranked* according to ability in subject matter, clarity of explanation, enthusiasm for teaching, teaching strategies, feedback & discipline style.



* Teachers ranked by the observer on a Likert Scale (1-5), max. score 65.

FIGURE 10

*Differences significant at the $p < .000$ level

TEACHING SKILLS

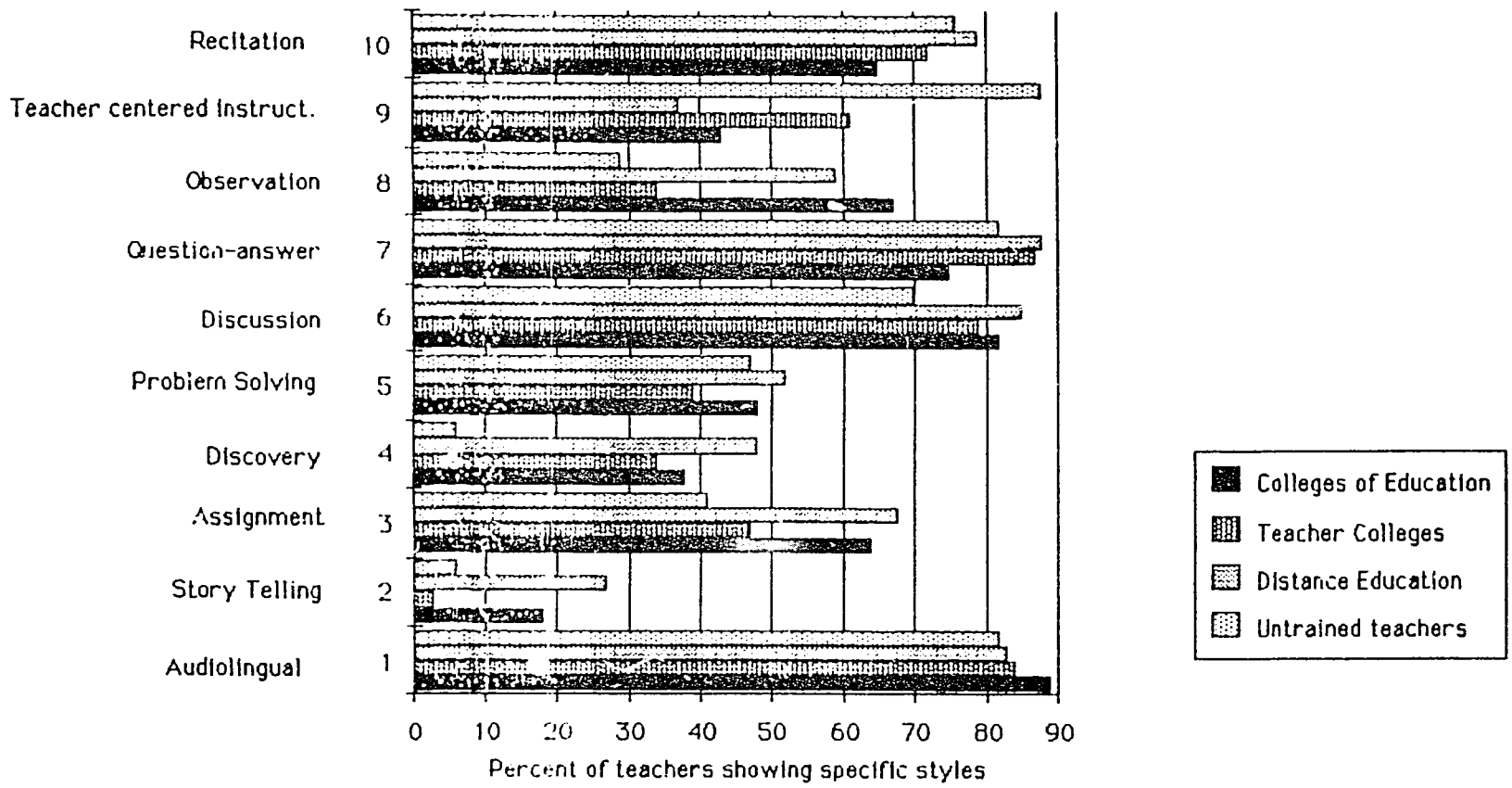


FIGURE 11

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activity. A larger score indicates appropriate behaviors conducting to the specific activity measured.

Table 6. Mean scores, standard deviations, and significance levels for trained and untrained teachers' classroom instructional practices observation measures.

Program	n	Review mean (sd)	Advanc. Organz. mean (sd)	Presen. mean (sd)	Guided Pract. mean (sd)	Indepe. Practi. mean (sd)	Homwrk mean (sd)	Class. Clima. mean (sd)	Total mean (sd)
C. of Ed.	68	.662 (.87)	.882 (.82)	5.05 (3.5)	14.3 (8.0)	4.67 (4.0)	1.54 (1.9)	2.58 (1.3)	29.76 (16.2)
T. Colle.	76	.474 (.07)	.632 (.79)	4.48 (3.2)	13.0 (8.4)	3.94 (3.8)	.724 (1.7)	2.40 (1.3)	25.67 (16.4)
DistanceE	84	.500 (.82)	.917 (.90)	5.00 (3.3)	14.3 (9.1)	4.91 (4.4)	1.36 (1.9)	2.52 (1.3)	29.59 (17.9)
Untrained	22	.273 (.63)	.682 (.83)	2.63 (3.03)	11.4 (8.6)	2.59 (3.5)	.909 (2.1)	2.09 (1.4)	20.59 (16.3)
F statistic		0.77	2.00	3.10*	0.95	2.49	4.40*	0.94	2.18

* Significant at the $p < .05$ level

Figure 12 shows the overall means for these observations.

Review

Often times teachers spend the first minutes of class doing review of the material studied the previous day as an introduction to the new lesson. This review could be directed to the homework assigned, or the previous lesson, or earlier lessons. In general, it is considered more desirable that a review of the homework assigned or of the lesson of the previous day to be carried out during this period than a long review of previous lessons or not review at all.

Ranking Teachers on Overall Performance

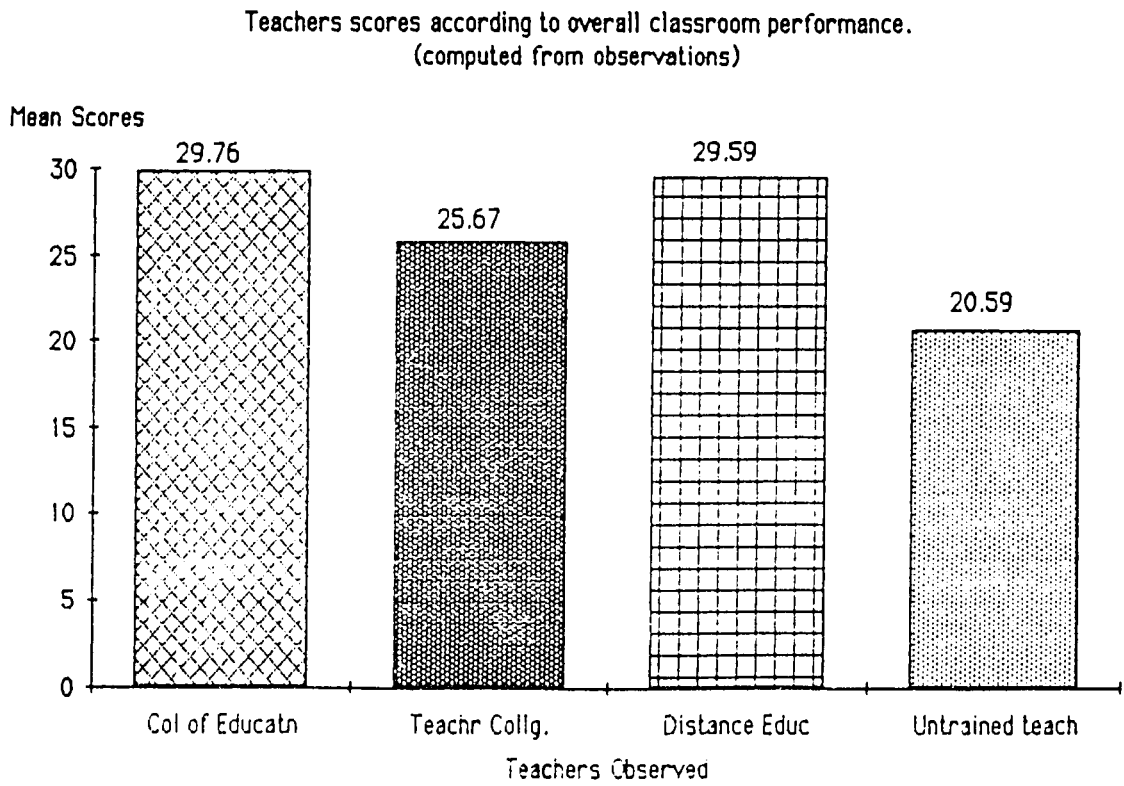


FIGURE 12

As table 6 shows there was not a statistically significant difference among the four groups of teachers in this specific activity. Colleges of Education and distance education teachers however, seem to conduct more efficient reviews of homework and/or previous lessons, whereas teacher colleges teachers seem less efficient in reviews of earlier lessons and old material, and untrained teachers seem not to carry out reviews at all.

Advanced organizers

The use of an advanced organizer or preliminary activities to the presentation of the new material are activities that many teachers are expected to do. The teacher may tell the children what the lesson will be about or what the title or the lesson is. These two activities are good examples of advanced organizers whereas asking the children to turn to the text or not conducting any preliminary activities would be seen as non adequate.

In table 6 most of the teachers seem to include advance organizers in their lessons. Teachers from Colleges of Education and Distance Education, however, seem to follow this practice more closely than their colleagues in teachers colleges and than untrained teachers.

Presentation of material

The manner the teacher presents the material is considered important in facilitating student learning, it can also make student learning difficult. For example presenting the material in small steps and giving children chance to practice after every step is considered a more favorable strategy to facilitate student learning than lecturing without opportunity to practice until the end of the lecture. It is also considered important that the teacher give definition of concepts, specific examples using the blackboard, charts,

pictures, etc. to illustrate ideas. Examples of inadequate teaching strategies would be to get children to practice the material without an effort to provide conceptual understanding of the class objectives or not to present any material at all. The pace and clarity of the teacher explanations, the level of difficulty of the concepts presented are also important factors.

Teachers from Colleges of Education and from Distance Education seem to be more effective teachers at presenting the material in class than their counterparts in Teacher Colleges. Untrained teachers, however, seem to be less effective teachers than their trained counterparts when presenting materials to students, and this difference is statistically significant ($F 3.10, p < .05$).

Specifically the difference seems to be that Colleges of Education and Distance Education graduates present the material in small steps giving practice after every step, give specific examples of the concepts presented, and use the blackboard, charts or pictures to illustrate ideas.

Guided practice

Guided practice or the careful supervision and feedback by the teacher on the initial efforts by the students to practice the material that is being taught is an important strategy in helping students learn. The manner in which this guided practice is provided will impact students' learning. For example it is seen as adequate that after the teachers' explanation the students start practicing with the teacher watching carefully the first attempts of the children to practice and giving them immediate and constructive feedback after the task is completed. Inadequate strategies would be beginning practice without explanations, or the children working on their own after the explanation, or not guided practice at all. Another important factors in guided practice that influence student learning are the nature of the tasks assigned

by the teacher, for example tasks that demand analytical reasoning, explanations and critical thinking of the material are preferred over summaries, recitation of material, memorization or other type of activities that are better left for homework. Similarly students centered activities would be preferred over teacher centered ones. Guided practice should encompass the stages of the Bloom taxonomy process, evaluation, application, synthesis, and analysis of the material learned to be effective. Pacing of guided practice, the number of children participating in the activities, the amount, timing, and quality of the feedback given and received are all relevant to children's learning.

Teachers trained in Colleges of Education and Distance Education seem to provide the same level of guided practice to their students than their counterparts in Teachers Colleges. Although not statistically significant, untrained teachers seem to be less efficient than the group of trained teachers.

It is in guided practice that the pupil seems to be more actively involved in the process of learning. This is manifest in students giving explanations and examples of the materials learned, the teacher asking the student to repeat the material and making sure they have understood it. The pupils are also asked to solve problems and practice written materials. It is possible to see, however, a great deal of teacher centered instruction even in guided practice such as students copying materials from texts or blackboard, watching teacher demonstrate tasks, and answering teacher's questions.

The learning style that seems to characterize Sri Lankan classrooms in this study fits less that following Bloom's taxonomy, --although there is an inclination to ask students for process, evaluation, application, synthesis, and analysis questions, (less than in 50 percent of the teachers ask for these

responses)-- than a more rigid model in which an specific question is expected to have one specific correct answer.

Independent practice

Independent practice or the series of activities in which the students are expected to engage on their own, requires less supervision from the teacher. Usually this activity is observed after guided practice or in those occasions where the students know the material and what is expected of them. To increase the effectiveness of the time students work independently, the teacher may choose to arrange the learning environment in such a manner as to make the most efficient use of resources in the classroom. This includes time as well as other students that may be able to help their classmates. Children may learn more if they work in small groups than if they work alone in their seats. As in guided practice the nature of the task will determine the effectiveness of learning. Students are likely to learn more if asked to provide explanations of material after discussions with classmates, or to participate in making models than if they are asked to copy material from texts or to simply read materials. Teacher feedback is also important during independent as well as the number of students to whom feedback is given.

Although most of the children were observed working alone at their seats rather than in small groups, teachers from the Colleges of Education and from Distance Education promote during independent practice the type of activities that are more likely to stimulate critical thinking and understanding than their colleagues in Teacher Colleges. Examples of these activities are asking students to give explanations and examples of materials, asking them to practice reading materials, discuss problems, and engage in exercises to affirm

learned concepts. Although not significant, the untrained teachers scored lower in this category.

Homework

Homework has been considered important in affirming student's learning and helping the teacher keep track of the pace at which the students are learning, it is also an excellent manner to provide feedback to the each one of the students. Although in general assigning homework has proven beneficial, certain types of activities will stimulate students' learning more than others. For example, writing definitions of new terms, examples of material, solving problems, writing original paragraphs may be more helpful than memorizing material without understanding the concept behind the materials. What the teacher does with the homework is probably more important than assigning the task itself. The teacher could either review each student's homework individually the previous day or individually with students during class. A less desirable way of checking homework such as asking students to correct their mistakes themselves, may not clarify questions students may have and may not give the teacher an accurate idea of who is falling behind.

Teachers who were trained in the Colleges of Education and those in Distance Education assigned homework to their students more frequently, and this homework is likely to be oriented towards helping students understand what they are learning in class. For example, students are asked to write examples of what they have learned in class, solve problems, re-write material learned in class. Often the homework requires students to do art work and other creative activities, make models or diagrams, and collect information that they will use during class. These teachers seem to make a habit of checking the homework themselves providing careful individual feedback in students'

workbooks, these teachers also check homework with small groups or sometimes with the class as a whole. There is a significant difference between these two groups of teachers and those from teacher colleges and untrained teachers who show a low score in this category ($F 4.40, p < .05$). Teacher college graduates and untrained teachers although they might assign homework they seem to choose to review with the whole group step by step while the student makes corrections in their workbooks.

Classroom climate interaction

Classroom climate has an important influence on student's learning, how comfortable they feel about asking questions to the teacher, and how much they participate in their own learning. It is assumed that a teacher should be polite, that students as well as teachers should exchange ideas freely, that the class is teacher as well as student driven. Discipline in the classroom is important in facilitating effective and efficient learning, and the teacher is expected to set clear norms and rules of behavior. It is also assumed that oral correction of behavior is preferable to physical punishment.

All the teachers observed in the classroom seem to maintain a similar level of classroom climate. Untrained teachers do show a lower score than their trained counterparts although this difference is not statistically significant. In Sri Lankan classrooms observed in this study, teachers and students were seen exchanging ideas freely. The teacher dominates the instructional dynamic by directing activities and calling upon students to respond. Discipline does not seem to be a problem since teachers seem to be able to set clear rules that students follow, there is however oral and in minor degree physical punishment in the classrooms observed.

The level of performance in classroom interaction of the different teachers observed does not seem to be statistically significant. However as in the other observation categories, untrained teachers do show a lower performance than their trained counterparts.

Time of classroom activities

Figure 13 shows the time that teachers spend in different classroom activities. The only statistically significant difference observed was the time allocated to assigning and reviewing homework with the teacher colleges graduates and untrained teachers dedicating more time than the colleges of education and distance education counterparts ($F 5.91, p < .05$). These findings contrast with the ones presented in the table above in that although teachers seem to be spending similar amounts of time in the activities shown, the use of this time may be more efficient for some groups than for others. For example in assigning and reviewing homework a group of teachers may spend more time because they do the review with the whole group step by step whereas other group may spend less time because he/she does it individually in student's workbooks and utilizes the time either in presentation or in guided or independent practice. This seems to be the case for Colleges of Education and Distance Education graduates in terms of the quality of classroom activities versus the length of time these activities consume.

TIME OF CLASSROOM ACTIVITIES

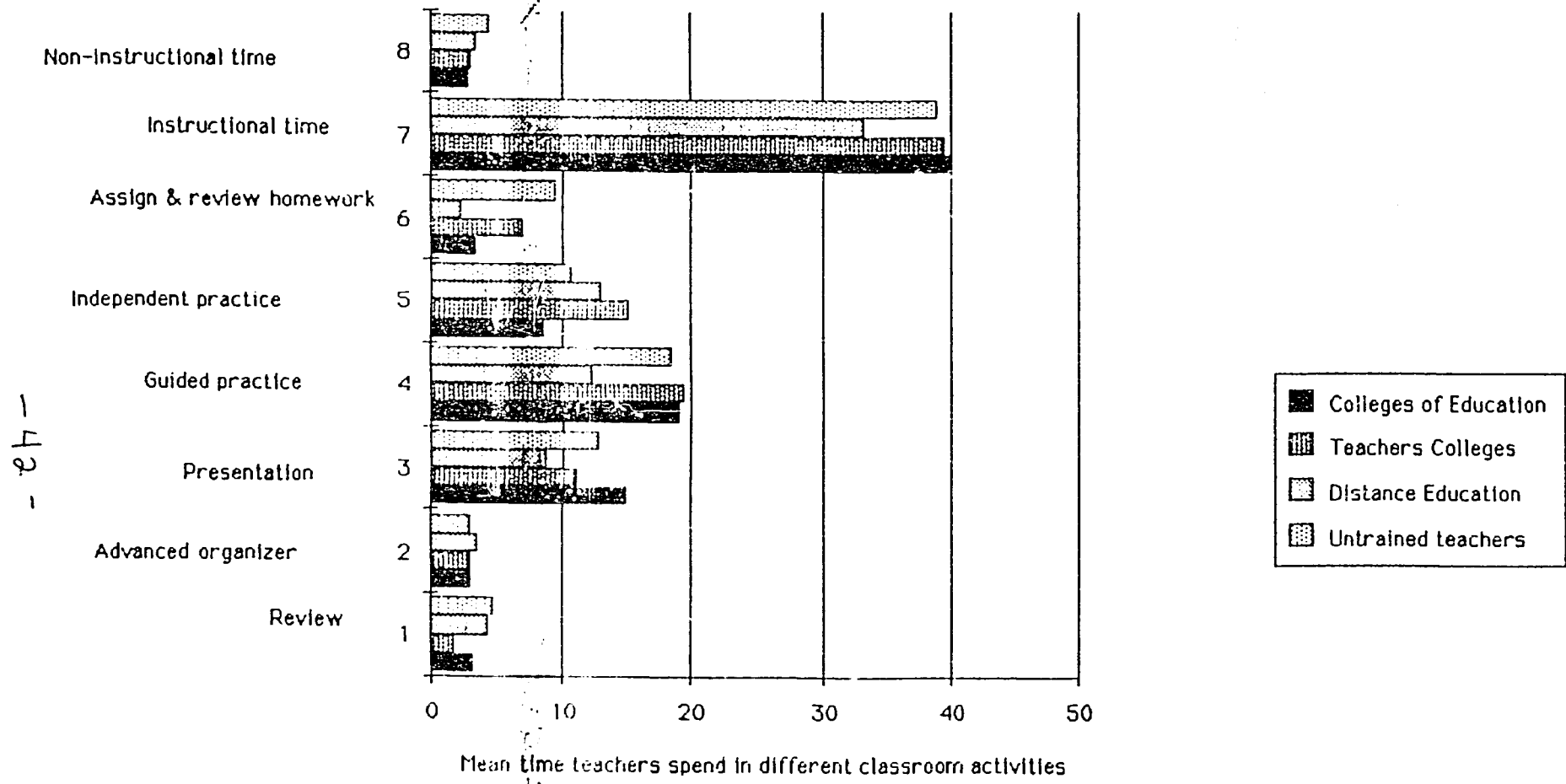


FIGURE 13

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Measuring Effectiveness of teacher's performance on student achievement.

As explained in the methodology section, two types of achievement tests were applied to pupils of 2nd and 4th years (equivalent to 1st and 3rd grades in the U.S. system), achievement in Mother Tongue and in Mathematics.

The analysis of data reveals that the achievement tests applied to pupils in the 2nd year are not reliable, possibly because of the complexity of the tests and the immaturity of the pupils. The achievement test applied to pupils in the 4th year are reliable and therefore this section will deal with that data.

The statistical analysis uses (multi-analysis of variance) controlled by school characteristics, this is, whether the school where the teachers are is congenial or difficult, by parent education and occupation, and by teacher background.

Table 7. Mathematics achievement for 4th year pupils by trained and untrained teachers.

Pupils taught by teachers trained in:	n	Mean	SD	Adjusted Mean*
College of Education	224	35.4	14.1	36.6
Teacher Colleges	509	35.2	14.0	34.4
Distance Education	325	34.6	14.1	33.3
Untrained teachers	118	29.6	15.0	30.6

F 16.80, $p < .000$ (for the regression equation)

F 5.16, $p < .005$ (for program effect)

* After adjusting for school type, student and teacher backgrounds.

The table above shows that there is a statistically significant difference between pupils of trained and untrained teachers. Whereas pupils of trained

teachers seem to do in general better, with Colleges of Education pupils scoring higher, pupils of untrained teachers score lower than the rest even after adjusting for school type and student background. These results only show the pupil performance in different classrooms it does not mean that the score is caused by the specific teacher or by the training these teachers have received. We try to clarify that point in the next section. Figure 14 shows these scores.

Table 3. Mother Tongue achievement for 4th year pupils by trained and untrained teachers.

Pupils taught by teachers trained in:	n	Mean	SD	Adjusted Mean*
College of Education	226	44.5	20.4	47.0
Teacher Colleges	502	43.4	22.4	41.5
Distance Education	329	41.5	21.1	38.6
Untrained teachers	118	34.8	21.9	37.1

F 17.84, p <.000 (for the regression equation)

F 8.26, p <.000 (for program effect)

* After adjusting for school type, student and teacher backgrounds.

The table above shows that there is a statistically significant difference between pupils who are taught by College of Education graduates versus their other trained counterparts and untrained teachers after adjusting for school type and student background. Figure 15 shows these scores.

The results presented above may be due to many factors among them the fact that due to political and social unrest in the island during the study, some schools were closed by long periods of time. It is possible that remote (difficult) schools were less affected by these disturbances than schools which

Mean Scores for Mathematics Achievement Level

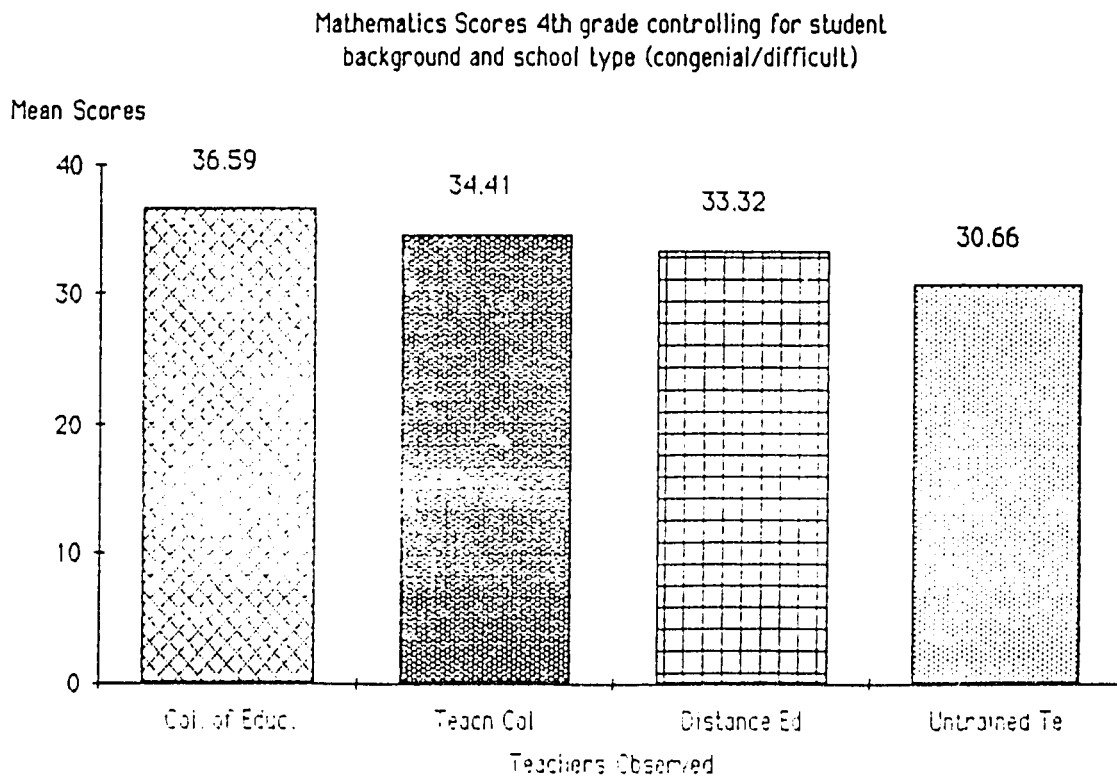


FIGURE 14

Differences significant at the $p < .005$

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Mean Scores for Mother Tongue Achievement Level

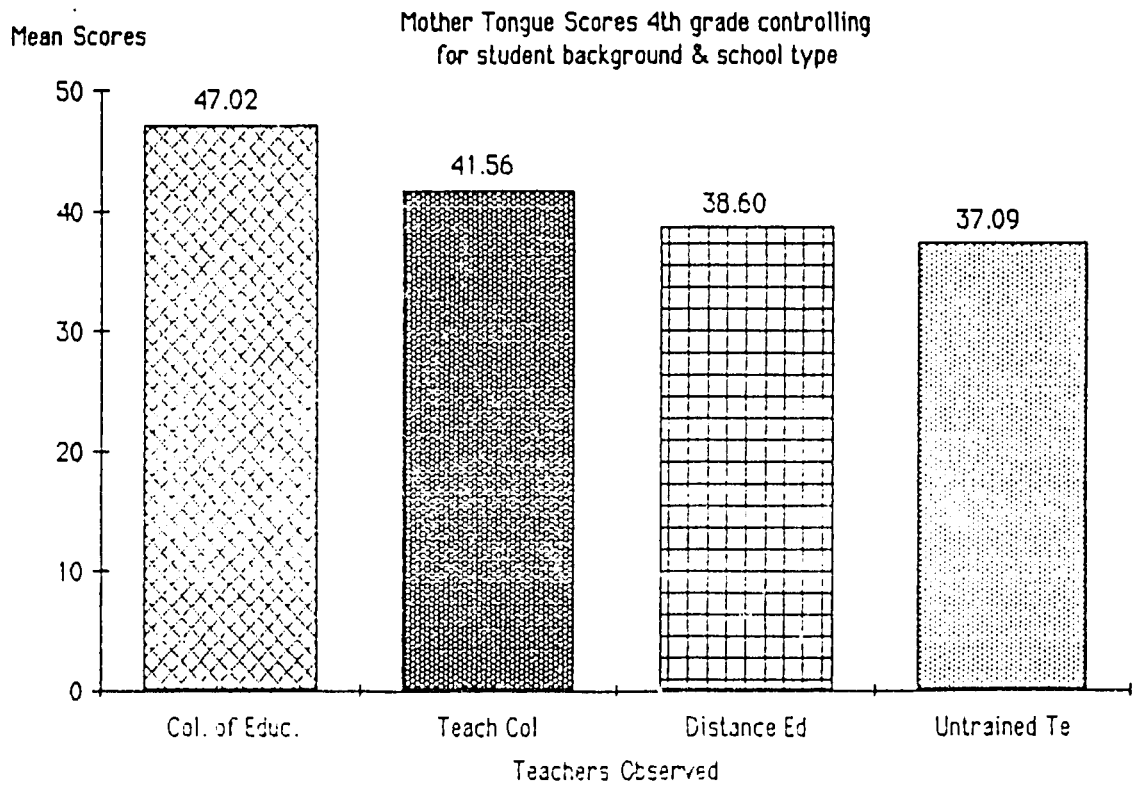


FIGURE 15

Differences significant at the $p < .000$

are considered as congenial but are more easily accessible. College of Education graduates were mostly teaching in difficult schools.

In order to understand how much teacher education does in fact affect student learning a series of correlations for those trained teachers are presented below.

The following are the correlations observed among the different variables measured in the study. Only the statistically significant correlations are included.

Table 9. Correlations among variables measured by the study. Mathematics.

Measure	n	mean	sd	Correlations				
				1	2	3	4	5
Pupil score in Math	110	34.0	13.8					
Math Teaching skills	110	7.1	2.2	.46*				
Math knowledge	110	6.2	3.1	.40*	.73*			
Teacher instruc.pract.	110	33.0	11.1	.33*	.92*	.70*		
Instructional time	110	39.2	8.1	-.49*	-.53*	-.57*	-.23*	
School type	110	.6	.5	-.44*	-.82*	-.46*	-.61*	.57*

*p < .05

As it is possible to see in the table above, several measures of teacher achievement and performance seem to be significantly correlated with pupil achievement in Mathematics. According to the correlations above, teacher's teaching skills, knowledge and instructional practices in Mathematics seem to have a positive impact on student's learning. According to the above correlations it seems that the longer Mathematics classes take the less the children learn, this may be explained by inefficient use of time by the teacher. Finally, the results of the correlations seem to indicate that students in the more difficult schools seem to be learning more than their counterparts in the other schools. This may be explained by several factors, among them by the fact that most of the colleges of education and a good number

of distance education graduates are teaching in difficult schools, and by the fact that these schools may have had less disruptions in their schedules than the rest of the schools.

In terms of pupil achievement in 4th year Mother Tongue, and looking at trained teachers a series of correlations among the variables included in the study are presented.

The following are the correlations observed among the different variables measured in the study. Only the statistically significant correlations are included.

Table 10. Correlations among variables measured by the study. Mother Tongue.

Measure	n	mean	sd	Correlations		
				1	2	3
Pupil score in Mother T.	825	41.4	21.2			
School type	825	.5	.5	.14*		
Mother T. skills	825	10.3	1.7	.10*	.07*	
Teacher attitude	825	159.1	13.8	.08*	.16*	-.03

*p < .05

As it is possible to see, two measures of teacher achievement and performance seem to be significantly correlated with pupil achievement in Mother Tongue. According to the correlations above, teacher's teaching skills, and teacher's attitude in Mother Tongue seem to have a small but positive impact on student's learning. According to the above correlations it seems that school type has the strongest impact on pupils learning. This may be explained by several factors, among them that accordingly to the region of the country where students live there are differences in terms of Mother Tongue spoken. Since school type is a proxy for students background, it seems that the

influence of the home in this subject is more important than the other factors included in the correlations above.

In conclusion, this study seems to indicate that teacher education may make a difference not only in terms of what teachers learn and are able to do in the classroom, but also in terms of how this training may affect pupil learning.

BRIDGES Sri Lankan Teacher Education Study
Cost Analysis Chapter

INTRODUCTION: Why do a cost analysis?

In general this research effort was mounted in order to assist policy-makers in formulating a rational and coherent national policy on teacher education. It was born out of a general concern for improving the quality and equity of the educational system, and a recognition of shortage of funds available for doing so. Research was seen as an objective means of assessing the extent to which existing teacher training programs were, in fact, improving the quality of the teaching force and at what costs. The results could be used in making well-informed decisions about organizational reform and financial allocation.

Any policy review of a field such as teacher education will thus need to pay attention to the costs of various teacher education programs. For such a review, it is constructive to view or analyze costs in a variety of ways. For example, the total or unit costs of alternative programs having the same objectives can be compared to show which are the most and least costly. Even more revealing is the treatment of program cost data in relation to measures of program effectiveness. This combination will allow for the determination of program cost-effectiveness, that this, the cost per unit of change in effectiveness measures.

There are other ways to view program costs as well. Program costs can be incurred by institutions or individuals. Those covered by institutions will need to appear in government or donor agency budgets, whereas those covered by individuals are considered private expenses. Governments may want to put more of a cost burden on to individual participants, but they do so at the risk of generating political unrest and/or a decline in demand for the program. A determination of the sources of funding for a program will help decision makers determine how the cost burden is being shared and whether the shares are reasonable given public/private resources and client demand.

Another way to analyze program costs is to differentiate between capital and recurrent costs. Capital costs for objects such as land, buildings and durable equipment require a heavy initial investment but relatively little cost support after that. Recurrent costs, covering such items as salaries, utilities and supplies/materials, are those which require annual allocations and are used up in one budget year. Such distinctions allow policy makers to determine the amounts required to establish a program (start-up costs) and how much is required to sustain it on an annual basis.

A distinction is often made between direct and indirect costs. Direct costs are those which involve funds which are actually spent for the program. Indirect costs refer to resources which are used or lost as a result of mounting or participation in a project. In the case of this study the main indirect cost that is considered is the foregone income of the students who participate in the programs, also referred to as opportunity costs.

Finally, is it possible to conceive of costs which do not involve funds or financial resources at all. To participate in a program a student may have to sacrifice much in terms time for family and recreational activities and may feel various pressures and stresses. These we refer to as social costs. Although they cannot be measured with the same amount of precision as monetary costs, they can be inferred through students answers to questionnaire items. In this study all program completers were asked to indicate the extent to which their participation caused such problems as a disruption in their family life, a loss of leisure time, anxiety over too much work to do, a decline in physical well-being, and an interference with religious, social and political obligations.

Our study takes all of these points into consideration. In this chapter we compare various programs in terms of their unit costs (with and without opportunity costs), examine the relative cost burden to sponsors and students in each program, and indicate how the cost are distributed across capital and recurrent cost categories. Finally, we compare the social or nonmonetary costs associated with each program. Analyses in which costs are related to measures of effectiveness will be presented in the next chapter (section).

PROCEDURES: Measurement and analysis

We decided to measure program costs directly as opposed to using budget allocation figures from the Ministry of Education. This was done because Ministry figures which are available reflect allocations (intended expenditures, not actual expenditures (the latter eventually become available but with a two-year time lag); they cover recurrent costs only and are at high levels of aggregation. Moreover, the official records contain nothing on student expenditures and opportunity costs.

We used two basic data collection instruments: one for institutional costs and one for private or student costs. The institutional cost questionnaire was filled out by senior project staff during interviews with key college administrators at the colleges and distance education centers involved in the study (i.e., Bolawalana and Gampola Teachers Colleges (TC's), Hapitigama

and Mahaweli College of Education (CE's), and the Distance Education (DE) Centers at Kandy and Kegalle). The institutional questionnaire covered recurrent expenditures for the academic year 1988, such salaries and benefits for instructors, administrators and support staff, utilities and communications, maintenance of buildings and equipment, supplies and equipment, books and publications, and staff training; and capital costs--the replacement costs of currently held buildings and furniture/equipment. Capital costs were amortized over the expected life time of the building/equipment using the prevailed discount rate of 12% (the rate used by the national savings bank over the past decade). In the case of the distance education program, central office buildings and equipment were estimated and an amount proportionate to the number of students in the program at the target centers was allocated to the costs of the program at those centers. At the centers, since more than the primary education program was covered, center cost were allocated to that program according to the proportion of students in it. For the teachers college which covered more than one program (namely, Bolawalana Teachers College, which has programs in English and Religion as well as Primary Education), the cost per student was calculated for the entire college, irrespective of the program in which students were enrolled, under the assumption that resource use was basically the same for all programs.

In the institutional cost questionnaire we asked administrators to indicate their source of funds. In most cases it was either the Ministry of Education or the students themselves. There were almost no contributions from community associations or outside organizations. This does not mean that all government funds were channeled directly through our sample institutions. In many cases they used instructors on secondment from other colleges (or from the Ministry). Moreover, TC participants received salaries paid through the school where they have been teaching. In the case of the DE program, much of the budget for equipment and recurrent costs has been covered by a grant from the Swedish government. These costs we have listed as costs to the "sponsor," although strictly speaking they represent extra-governmental resources which may or may not be assumable by the government once the Swedish aid funds are terminated. For purposes of our analyses of cost burden, we will consider seconded resources and grant funds as part of the sponsors' cost burden. Such aggregation would not be appropriate if we were trying to predict future government budget requirements.

The student questionnaire was administered to those who had just completed their course, generally a 25-40% sample of the 1988 graduating class. They were asked to record their personal costs and allowances for the years during which they were enrolled in the project. The annual cost figure which was used together with the annual institutional cost figure was that for 1988. Since the final year cost figures for teachers college participants was for

1987, those figures were converted to 1988 values using the prevailing inflation factor of 7.5%. Opportunity costs were computed on² based on direct questions to the students in which they were asked to estimate how much income they sacrificed during the year because of their involvement in the program. College of education students, most of whom were just out of secondary school, were asked how much they would be earning if they had taken a job instead of enrolling in the college.

Students at the colleges (Teachers Colleges and Colleges of Education) receive allowances during their training program and pay fees. College of Education students receive a modest monthly stipend, most of which is recovered by the college in the form of "facilities fees." Teachers College participants, all of whom are experienced teachers, receive their regular salary during their leave of absence in the training program, some of which is returned as facilities fees. Participants in the distance education program also continue to receive their salaries, but they also maintain full teaching loads. Thus, we did not consider them as having received an allowance.¹ In addition, they paid no facilities fees. Since the above are essentially transfer payments, we were careful to avoid double counting them. For example, student allowances were counted as an expense to the sponsor but as income to the students; conversely, student fees were counted as income to the sponsor but as an expense to the students. The net effect of these transfers will be shown in versions of our analysis called "Net cost per student."

One more adjustment that we made was in the calculation of costs for the DE program. Students cover basically the same material in this course as in the other courses, but being part-time students they take longer to complete it (an average of 3.1 years compared to 2 years in the other two kinds of programs). In order to develop a valid basis for comparison we transformed annual DE costs into costs per a full time equivalent. The multiplier which we used for this was 1.55 (namely the average DE completion time--3.1 years--divided by the completion time in the full time program--2 years).

Before our instruments were used with the institutions and

¹It has been discovered that some teachers are given a release day (generally Friday) in order to visit their distance education study center. We have no data on how many receive such a day and how many days a year they receive. Assuming for now, that the teachers in our sample received on the average two per month (about 19 days a year), and that they earn on the average Rs 1200 per month (about Rs 50 a day), they could be seen as receiving an annual study allowance of Rs 950. The amount would increase the net costs for their program by about 15-20%. I will seriously consider adding this in subsequent drafts of this paper.

students they were reviewed during a professional workshop in Colombo, involving college teachers and administrators (the entire cost analysis design was reviewed as well). Feedback was acquired which was used in improving the clarity and format of the items. Once the data was collected it was first analyzed by institution. The academic year 1988 was selected as the benchmark year for all institutions. (We had data for preceding years also, and having checked them concluded that there was nothing extraordinary about expenditure patterns in 1988.) Tables were constructed for each institution combining institutional and private costs data for 1988. They included costs to the sponsor and student (including opportunity costs), transfer payments (allowances and fees), total and net costs to sponsor and student, number of students in the program during 1988, and both total and net costs per student. Alternative figures are also given in which only direct costs are used--this is, in which opportunity costs are excluded. The following is an example of a summary table for an institution. Since our main interest is in comparing costs across types of programs and not individual institutions, we have placed the summary tables for the other institutions in the appendix.² After that we developed a set of summary tables in which the costs were pooled across the two institutions in one type of program. These are the results that which will be reviewed next.

²An examination of the summary tables for the individual institutions reveals much greater variation between types than within them. In fact, the results for the two institutions under each type were very similar.

FINDINGS: Annual training costs by type of institution

Although the total and net costs are available, for comparative purposes we have chosen to show the total and net costs per student, since the number of students enrolled during 1988 varies from institution to institution. As mentioned above, we use the type of institution here as the unit of comparison. This is done by pooling the costs per students of the two institutions under each program type (Teachers Colleges, Colleges of Education and Centers of Distance Education). These are not to be taken as representative of the entire set of institutions of this type. There still be may be considerable within group variation which we have not taken into account. What we show are simply the pooled unit costs of two illustrative institutions.

Total Direct Costs Per Student

Table C1 shows the results of the unit cost analysis, by type of institution and source of funds. The figures are total direct costs per capita (i.e., they do not include opportunity costs and transfer payments). It is clear that the College of Education programs are considerably more expensive than those in the other two types of institutions (almost 3 times the Teachers College program and about 7 times the distance education program). These differences are mostly in the costs to sponsor; the costs to the student vary much less (in this the CE programs are only 1.5 and 4 times higher than the other two programs, respectively). Looking at it another way, the direct costs to students in the College of Education programs are about 19% of the total, whereas in the Teachers College and Distance Education programs they are about 33%. This, of course, doesn't mean that those in the TC and DE programs have to pay more for their training; in fact, they pay less. They simply pay a higher percent of a relatively low overall cost.

Net Direct Costs Per Student

When transfer costs (allowances and fees) are taken into account a somewhat different picture emerges. Table C2 shows the net direct costs per student. Here we see a moderate increase in the unit cost for the College of Education programs, a dramatic increase in the costs for the Teachers College programs (around 2 1/2 times those in the previous section) and virtually no change in the Distance Education programs costs. The dramatic change in the Teachers College program is explained by the fact that participants maintain their full time salaries. Here the real cost to the education system comes in the need to hire replacement teachers for the classes the trainees vacate. (In case they are not replaced the costs are felt as a decline in services to the students.) As mentioned above, some of this "allowance" is returned to the program in the form of fees, but this is modest. The net effect of these transfer payments is a dramatic increase in the costs to the sponsor and a decrease in the costs to the students--in fact, for students the figure becomes negative, meaning that they end up with a net gain. (Since they do not relinquish their need to support their families--most are married with children--this does not seem to be unreasonable.) The relatively modest exchange of allowances and fees for the College of Education students has the same effect as above: the costs go up for the sponsor (although here only about 20%) and down for the students--to a figure near zero, implying that the students basically break even. In terms of costs burden, when the transfers are taken into consideration it is clear that there is virtually no costs burden (at least in terms of direct costs) to those in the CE and TC programs; however, those in the DE program continue to a burden of about 33%.

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Total Costs Per Student (including Opportunity Costs)

The above analyses have only dealt with direct costs paid by institutions or students. When indirect costs are included (namely student opportunity costs) the picture changes once again. Table C3 shows the effect of this inclusion on the total costs per student. Obviously, the change is only in the cost burden on the student. If one compares the student costs here with those in Table C1, it is apparent that the CE students see participation in the program as having rather high opportunity costs. As senior high school graduates they presumably could have found decent jobs on the open market, had they not decided to pursue their training program. Participants in the TC program seem to bear the lowest opportunity costs, reasonable since as full-time students they have a load roughly equivalent to what they had as full-time teachers. Some loss of income is nevertheless indicated, which is probably a consequence of their being away from home and the options it afforded for part-time work. Those in the DE program apparently sacrifice more. (This may come as a surprise to those who assume there are no opportunity costs associated with distance education.) The heavy load of having to teach during the day and study at night seems to require many DE program participants to set aside extra jobs and other secondary sources of income. In sum, if opportunity costs are included, the cost burden to the students in the various type of institutions becomes: CE, 36%; TC, 42%; and DE, 64%.

Net Cost per Student (including opportunity costs)

The final table in the series (C4) show the cost figures when both transfer payments and student opportunity costs are included. This way of representing costs yields the highest figures of all, especially for the campus based (CE and TC) programs. For the CE programs there is hardly any change from previous figures since the transfers involve only a small student fee. The relative costs of the programs are also different from the what was seen when we looked at direct costs only (Table C1): When net costs are used and opportunity costs included CE programs can be viewed as only 50% more expensive per student than the TC programs and 5 1/2 times more than the DE programs. Transfer payments are still seen as advantageous to TC students, but when opportunity costs are considered, the advantages are less than previously perceived: net gain is 16% lower than in the previous presentation (Table C2). CE students, who appeared to be breaking even in the previous net costs analysis, are shown to be bearing a fairly heavy cost once opportunity costs are considered. The cost burden for the DE students is clearly the highest in percentage terms (67%) but since the overall costs for DE programs are so low, it is still not as high as that for CE students in absolute terms (\$167 for DE vs 226 for CE).

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Distribution across the different cost categories

Table C5 gives a general breakdown of the annual institutional costs per student for the various types of programs, showing both capital and recurrent costs. Looking at the unit costs it is clear that the greatest contrasts among the program types are in capital costs: those for the CE's are roughly 6 1/2 times those for the TC's and an astounding 56 times those for the DE programs. From another point of view, they comprise 40% of CE program costs; 29% of TC programs costs, and a mere 5% of DE programs costs. The CE's show an especially high relative expenditure for buildings, their highest cost category. Expenditure patterns for the conventional colleges on other categories (e.g., furniture and equipment and staff salaries) are rather similar, but they lie in stark contrast with those for the distance education programs. For example, DE programs spend only 3% on furniture and equipment (compared to around 12% in the others), but 45% for staff salaries (compared to around 25% in the others). Their proportion of funds spent on "others" (which includes books and materials) is about 2-3 more than the conventional colleges'. These findings might be surprising to those who are accustomed to noting the high "fixed costs" of distance education programs. The program in Sri Lanka differs from the norm in that they have no mass media components (radio;TV). Instead, it has a very heavy reliance of self-instructional materials and supervised group activities (requiring the assistance of tutors). Although this keeps their unit costs down, their marginal costs are not as low as in more media oriented distance programs, since they have to increase module production and add tutors as they expand.

Nonmonetary or Social Costs

Participants in various programs, although earning the some kind of certification, are in very different social circumstances. As was pointed out earlier, those in the Colleges of Education are young, single, recent secondary school graduates, all of whom live on campus under close supervision and full academic and social programs. Those in the Teachers Colleges program are experienced teachers, most of whom are married and have begun families. Some of them also live on campus, but have little supervision or structure to their social lives there. They return home as often as they can. Those in the distance education program are also experienced teachers who are married and have families. They, however, have chosen to remain as full-time teachers in their regular schools and thus continue to live at home. Under these circumstances they experience an increase in workload and the need to balance the competing demands of home, course, and workplace.

The results of the social costs analysis (see Figure C1) reflect the various pressures that the three groups are under. As the graph shows those in the CE program complain significantly more than the others about disruption of family life (homesickness?) and poor living conditions. Other than that, however, they appear to bear fewer social costs than the others. Those in the distance education program also experience relatively high levels of family life disruption. In addition, they feel more anxiety than the others over workload, more loss of leisure and more interference with social, political and religious life. (The latter is probably because they are the only ones who have changed status but stayed within their old social networks.) Those in the TC programs show relatively high levels of workload anxiety and tension, especially compared to the CE groups, which seem to be fairly relaxed.

Looking at the overall figures, it appears that DE program participants are paying the highest social costs, followed by those in the TC programs and then those in the CE programs. It seems that it is not easy to be teacher, homemaker (or head of household) and DE training program participant at the same time. On the other hand, the CE program provides a relatively unstressful environment, marred only by some homesickness and dissatisfaction over living conditions. The high financial investments on this group appear to have been successful in keeping its social costs down.

Summary and Conclusions

In this chapter we have examined the unit costs of the three teacher education programs, represented in various ways, have analyzed the relative cost burden to institution and student, have shown the distribution of costs across the gross categories of capital expenditures and recurrent costs, and have demonstrated

student perceptions of their social costs.

In terms of direct expenditures (excluding transfers), the annual cost per student for the CE programs (\$972) is far greater than that for the others (TC, \$364; DE, \$139). Direct student contributions are of the same order of magnitude, but the student cost burden varies considerably between the Colleges of Education (19%) and the others (TC, 34%, DE, 33%). When transfer payments are taken into account, the total costs per student in the conventional college programs, where allowances are paid, are considerably higher. This is especially the case with TC participants, since they receive a full teacher's wage (direct costs for them can be revised upwards to \$825), but it is also true for those in the CE programs (direct costs increase to \$1165). Transfer payments for the DE program are so small they scarcely affect direct costs. The allowances in the former programs more than offset both fees and student direct costs, such that a net gain is apparent in the TC programs and a "break-even" point in the CE.

Adding opportunity costs to the mix changes things yet again. Students in all programs bear opportunity costs, but on average they are highest for CE students and lowest for TC participants, who get to draw their salaries while studying and still have time for some part-time work. When opportunity costs and transfer payments are considered simultaneously, the overall unit costs of the programs are higher than originally perceived (CE, \$1401; TC, \$878; DE, \$251). The student cost burden under this accounting is negative for the TC program students (they show a net gain) and about 16% and 67%, respectively for the CE and DE program students.

Given this situation one wonders what motivates teachers to to continue to enroll in the DE program. This is a complex question, itself requiring a research study, but part of the answer could be found in the pattern of allocating teachers to schools. Those who complete the CE program can look forward to placements during their first few months in disadvantaged areas. On the other hand, those who stay at their jobs and pursue upgrading through distance education program can expect to remain in their current positions if they so desire. This can be quite a motivation for people who are already deeply rooted in relatively attractive locations.

Concerning the distribution of costs across categories, there are some remarkable differences across programs. In the CE program about 40% of the costs are in the capital cost category (largely for buildings), whereas about 60% are recurrent. In the TC programs only 29% are capital and 71% recurrent. The DE programs have a very modest capital cost component (9%)--in fact, over 80% of their costs are tied up in just two items: tutors and self-instructional modules.

These findings lead one to wonder if the CE programs are not

perhaps spending more than they need to on buildings and equipment. It may be possible to organize CE programs which are more labor intensive, and which use more modest facilities. One is also left to wonder whether there are ways to increase the CE students' relative cost burden (now shown to be negligible if opportunity costs are omitted; around 16% if they aren't). Of course, this would have to be considered in light of its influence on student recruitment and morale. However, if we are correct in our assessment that CE students' direct costs (including transfers) are slightly on the negative side (around a -\$10), then there appears to be a basis for a relatively painless cost recovery.

With respect to social costs, our analysis revealed an interesting pattern. What we perceive is a certain reciprocity between financial resources spent by the institution and social costs incurred by the participant. For example, students in the relatively well endowed CE programs incur relatively few social costs (i.e., they are relaxed and relatively unperturbed by loss of leisure and social status/participation). This is in contrast with the DE program participants. Government expenditure on their program is very modest; in turn they incur relatively high social costs in terms of stress, loss of leisure time and reduced social status/participation. Other studies of distance higher education (Nielsen and Djalil, 1989; Khan et al., 1987) have found these factors to be highly correlated with student drop-out and rate of progress. They may also be related to the program's success in recruiting students. The point is that if only financial costs are considered there will be an underestimate of the student's "cost burden." This is true in all the training programs considered here, but especially in the case of the DE programs. Program managers and policy makers would do well to develop ways of reducing such costs, by strengthening social support systems and by providing ways for students to reduce stress. For the DE course this may mean opening up learning groups closer to the participants home/school and stretching the training program over a longer period of time.

Table C1
TOTAL DIRECT COST PER STUDENT BY TYPE OF INSTITUTION AND SOURCE OF FUNDS
(In Sri Lankan Rupees and US Dollars)

	<u>Teachers Colleges</u>		<u>Colleges of Educ</u>		<u>Distance Education</u>	
	Rupees	Dollars	Rupees	Dollars	Rupees	Dollars
Overall	10,929	364	29,161	972	4,160	139
To Sponsor	7,230	241	23,658	789	2,787	93
To Student	3,699	123	5,503	183	1,374	46

Table C2
NET DIRECT COSTS PER STUDENT BY TYPE OF INSTITUTION AND SOURCE OF FUNDS
(In Sri Lankan Rupees and US Dollars)

	<u>Teachers Colleges</u>		<u>Colleges of Educ</u>		<u>Distance Education</u>	
	Rupees	Dollars	Rupees	Dollars	Rupees	
Overall	24,753	825	34,961	1,165	4,024	134
To Sponsor	21,054	702	29,458	982	2,650	88
To Students	(10,126)	(338)	(298)	(10)	1,511	50

Table C3
TOTAL COST PER STUDENT (INCLUDING OPPORTUNITY COSTS) BY
TYPE OF INSTITUTION AND SOURCE OF FUNDS
(In Sri Lankan Rupees and US Dollars)

	<u>Teachers Colleges</u>		<u>Colleges of Educ</u>		<u>Distance Education</u>	
	Rupees	Dollars	Rupees	Dollars	Rupees	
Overall	12,507	417	36,241	1,208	7,662	255
To Sponsor	7,230	241	23,658	789	2,787	93
To Students	5,277	176	12,583	419	4,875	162

Table C4
NET COST PER STUDENT (INCLUDING OPPORTUNITY COSTS) BY
TYPE OF INSTITUTION AND SOURCE OF FUNDS
(In Sri Lankan Rupees and US Dollars)

	<u>Teachers Colleges</u>		<u>Colleges of Educ</u>		<u>Distance Education</u>	
	Rupees	Dollars	Rupees	Dollars	Rupees	Dollars
Overall	26,330	878	42,041	1,401	7,524	251
To Sponsor	21,054	702	29,458	982	2,650	88
To Students	(8,548)	(285)	6,783	226	5,012	167

Table C5
 CAPITAL AND RECURRENT EXPENDITURES PER STUDENT
 IN 1988 BY TYPE OF INSTITUTION
 (In US Dollars)

<u>Category</u>	<u>Teachers</u>		<u>Colleges</u>		<u>Colleges of Educ</u>		<u>Distance Education</u>	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
Capital	69	29%	446	40%			8	9%
-Buildings	42	17%	317	28%			5	6%
-Furniture and Equip	27	11%	129	12%			3	3%
Recurrent	172	71%	675	60%			85	91%
-Salaries/Benefits to								
-Lecturers/Instr.	71	29%	285	25%			42	45%
-Admin & Supt Staff	55	23%	251	22%			10	10%
-Other	46	19%	139	12%			33	36%
TOTAL COST/STUDENT	241	100%	1,121	100%			93	100%
		100%		99%				100%

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Teacher Motivation

An important part of how teachers do their job is how motivated they are. This motivation is assumed to be highly dependent on salaries, incentives, and their job environment. Data collected at this respect shows that teachers in general are under paid. Fifty percent of the teachers interviewed at their schools reported no receiving a salary at the moment of the interview, this included 61.5 percent of teachers trained in teacher colleges, 37.5 of teachers trained in Colleges of education, 51.1 percent of teachers trained in Distance Education, and 50 percent untrained teachers. The rest of the teachers reported making in a range of 2 to 95 Rupees per month.

Teachers were also asked about other type of compensation they receive such as allowance. Seventy-six percent of the teachers said they do not receive allowances. Twenty percent said they receive allowances for serving in difficult areas, of these 42 percent were teachers trained in Colleges of Education, 25 percent untrained teachers, 17 percent trained in teachers Colleges, and four percent trained under distance education. Three percent of the teachers said they receive allowances for in-service courses.

The fairness in determining salary was explored by asking teachers about the criteria that determines how much they make. Different from other systems in which salary is determined by seniority or evaluations, in Sri Lanka most of the teachers agreed (87 percent) that salary is determined by education attained and other qualifications. The rest of the teachers about 13 percent believe that their salary is either determined by seniority, evaluations, place of assignment, or by certifying examination.

The fact that salaries are determined by level of educational qualifications may cause dissatisfaction in those teachers who do not have the means to pursue an education, and who may see the arrival of newer better qualified teachers with discouragement and resentment.

A scale on job satisfaction "The Job Descriptive Index," from Bowling Green State University (1975) was applied in order to determine how these teachers see their job. The following table shows the summary results.

Table 1. Job descriptive index by trained and untrained teachers. Percent represents those who answered "yes."

<u>Job descriptive index</u>	CE (30) %	TC (33) %	DE (40) %	UT (9) %	Percent of Total respond. %
<u>Work on present job:</u>					
Routine	27	18	20	56	24
Uncomfortable	40	21	39	11	32
Healthful	10	18	8	0	11
Sense of accomplishment	67	85	85	56	78
<u>Present pay:</u>					
Satisfactory salary	20	12	24	0	18
<u>Opportunities for promotion:</u>					
Unfair promotion policy	40	53	44	22	44
<u>Supervisor:</u>					
Tactful	64	72	71	67	69
Up-to-date	43	59	63	33	55
Quick tempered	11	6	5	11	7
Stubborn	7	0	0	0	2
Lazy	0	0	3	0	1
<u>People in present job:</u>					
Slow	30	6	12	22	16
Stupid	0	0	0	0	0
Smart	77	91	98	78	86
Hard to meet	20	67	66	56	53
<u>Job in General:</u>					
Makes me content	80	91	90	44	84
Rotten	0	0	0	0	0
Poor	0	0	0	11	1

Accordingly with the previous results it is possible to conclude that teacher in Sri Lanka generally like their job, their co-workers, and their supervisors.

Areas that can be improved include teacher's work conditions, the level of salary as well as the time in which this salary is paid, the policies for promotion which are perceived by more than 50 percent of the teachers as unfair, and the preparation of the supervisor who was perceived by forty five percent of the teachers as out of date. In general untrained teachers seem less satisfied with the work conditions and salary. Teacher Colleges graduates seem less satisfied with the promotion policies.

Conclusions

The educational system in Sri Lanka since the early 1980's has been going through a series of reforms all looking to improve the efficiency of the educational system.

In the White Paper of 1981, a group of educational reformers suggested that one reason for the inefficiency of the educational system could be found in the quality of the teachers. As a quote from the White Paper makes evident:

"In Sri Lanka the teachers of the olden days occupied a place of honor in the society and designated Guru in national languages, were almost looked upon with reverence by the common folk. This honor was bestowed on them because of the dedication with which they performed their tasks of imparting knowledge and skills. Our teachers held this revered position until a few decades ago. But in recent times we have witnessed a gradual deterioration of the status of the teacher, with the result that the teaching profession today has failed to attract people of the right calibre... [I]f the teaching profession is gradually drained of teachers of good quality, it has to be considered a major disaster, specially for a developing nation, because national development is dependent to a very great extent on education."

The concern with the decreased level of quality in the teachers prompted the development of two innovations in the 1980's in teacher education specifically designed to deal with issues of selection, development of effective teaching strategies, create the image of teachers as professionals, opportunity for higher salaries and promotions, among others. These two innovations are the colleges of education a pre-service approach and the distance education an in-service approach. These two approaches along with the teachers colleges are the major trainers of elementary teachers in the island.

This study of the effectiveness of these approaches was developed with important policy goals. Resources in Sri Lanka are limited and the educational system is committed to investing in those programs that train the most effective teacher. Because of the recent reform initiatives, promotions and salary increases are only possible by obtaining a certificate which in turn is

expected to elevate the status of the teacher to that of a professional. The teacher education programs studied serve to determine what strategies, under what conditions, produce effective results. For example it is possible to compare the effects of supervised teaching versus the absence of it in the teacher training programs studied. Similarly it is possible to talk about interactive teacher training where what teachers learn as part of their training is almost immediately put into practice with feedback on the results obtained. In short, this study was designed to inform policy makers with evidence of the effectiveness of teacher education for elementary teachers to facilitate the development of informed policy choices.

One of the most important instruments of the educational reform for achieving the purposes of an educated work force, national unity, quality education for both pupils and teachers, are teacher education programs in their diverse modalities. Thus teacher education is expected to develop mechanisms to attract qualified people to the teaching profession, retain qualified teachers, specially in those areas in need of good teachers, improve the economic, professional, and academic status of the teacher, provide an adequate supply of well trained and qualified teachers in order to improve the overall quality of the educational system. The assumptions held by these approaches and the mechanisms developed to carry out their goals determines the extent to which these innovations may be able to achieve a better status for the teacher and as a consequence contribute towards improving the quality of schooling in Sri Lanka.

As previously discussed, the three approaches studied can be seen as three different models to educate elementary teachers.

The model behind teacher colleges is that experienced teachers could be more effective if they receive formal teacher education based on pedagogy and

skills mostly directed at how to teach the pre-designed curriculum given to them, and if they have possibilities for advancement and promotion which are given through the credential obtained when they finish their program. The assumption behind this model is that experienced teachers who are already committed to teaching will take more advantage of the training, and providing avenues for promotion will encourage them to continue teaching.

The model behind the Colleges of education depends on attracting capable individuals at the beginning of their careers and provide them with formal teacher education with an emphasis on a diversified curriculum stressing co-curricular activities, pedagogical knowledge and practice. Included in this model is a different approach to educate teachers and an attempt to encourage critical thinking within the framework of the State. The program purposes to form a critical mass of well educated teachers who will know how to apply the curriculum and the subject matter they have been taught and who have good possibilities to become educational leaders. They also have good possibilities for advancement and promotion. The most important concept behind this model is the opportunity for this program to mold character and attitudes.

The distance education model relies heavily in materials with an emphasis on subject matter and in the teacher as an individual learner. Pedagogical knowledge is something that the teacher is supposed to possess as result of their teaching experience and a skill they will be able to perfect as they move along the training program. The model could be described as "applying while learning" based strategy. The development of close ties with other teachers is encouraged through the use of tutors and the creation of regional centers. Possibilities for promotion and advancement are similar to that of the other programs.

The key findings of the study illustrate both the strengths and weaknesses of the approaches studied.

One of the most salient findings was that throughout the training program, after finishing training, and while teaching in the classroom, pre-service training (Colleges of Education) seem to have a monotonic positive effect on learning of subject matter knowledge and teaching skills over the in-service approaches (Distance Education and Teacher Colleges). This is, in spite of the fact that Colleges of Education teacher candidates at the beginning of the program score lower than their counterparts in teaching skills. Those measured at the end of the program and those measured while teaching in the classroom show a constant increase in their performance.

In terms of the written measures of teaching skills or pedagogy, Distance Education seems to have the higher level of performance than their counterparts in the institutionalized training programs (Colleges of Education and Teachers Colleges).

Attitudes is the area where the training programs propose to improve the image that teacher trainees have of the teaching profession, the community, and the students. None of the programs studied seems to be significantly successful in improving the attitudes that teacher trainees bring with them when they enroll in the programs. The teachers seem to change their level of attitude towards a more negative level over time. It should be stated, however, that the attitudes of the teachers were already quite high at the beginning of their programs.

In terms of teacher performance in the classroom, documented through observations, the data shows that graduates from Colleges of Education and Distance Education seem to have a higher level of performance in terms of the use of effective teaching strategies such as assigning and reviewing homework,

actively involving their pupils in the teaching and learning process, careful monitoring of students progress during class, mastery of subject matter, effective teacher student interaction, and effective use of instructional resources, than their counterparts in teachers colleges. This is a result that would be expected from distance education graduates according to their performance in the written measures of pedagogy while in the program and after finishing it, but an unexpected result for colleges of education graduates specially when considering that they have less experience in classroom teaching than the graduates from in-service programs. Since teacher colleges seem to follow a more traditional curriculum and lack resources to acquire up to date information in teaching strategies advocated by current research, it is not surprising to find them in relative disadvantage with their counterparts trained in the recently created, more modern, approaches.

Pupil achievement measures in the areas of mathematics and mother tongue 4th year, seem to be consistently higher for those who are taught by trained teachers in the three approaches, than by those taught by their untrained counterparts. Although it is difficult to attribute higher pupil achievement to teacher training directly, research on effective teaching and effective schools has shown a strong correlation between what the teacher does in the classroom and how much students learn. What the teacher does in the classroom is seen as informed by training in instructional techniques and practices, and by the knowledge of the subject matter.

Finally, in terms of costs, colleges of education are 8.69 times (2,243 dls.) more expensive than distance education, and teacher colleges are 6.15 times (1,588 dls.) more expensive than distance education (259 dls). This is cost per cycle, per unit "change" in outcome; and "change" per dollar expenditure.

What is it in each program that leads to the different results?

The better achievement of the colleges of education over the other in-service programs specially in subject matter knowledge makes evident the effectiveness of the selection policy in the colleges of education in which only A/L graduates are admitted to the program. The college of education program may help to reinforce and increase the knowledge, specially in Mathematics, that they bring to the program and may account for the retention level observed at the moment of classroom teaching.

The better achievement of the in-service programs and specially distance education in pedagogy or teaching skills may be explained by the previous experience these teachers have when they start their program. It is important to notice two things: 1) that the distance education program offers teachers not only the possibility of practicing while they learn but also offers them the possibility of interacting with tutors and other teachers and comment about their teaching in a weekly or bi-weekly visit. They also receive some monitoring and all of this factors may account for their success in their level of performance in teaching skills. 2) the college of education graduates in spite of showing a lower level of pedagogical skills at the beginning and end of the program, the graduates that were observed in the classroom show a performance level parallel to that of the distance education graduates. This may indicate the effect of supervised practice with feedback in the classroom for a period of close to a year. Both practices, learning while teaching and supervised practice for a year, seem effective in improving and increasing performance in pedagogy. The weaker performance of teacher colleges graduates in this area may be due to the erratic character of supervised practice which was finally suspended in 1988

The better performance in the classroom of colleges of education and distance education graduates, seems to be explained by both the quality of the training received and constant feedback on performance. The colleges of education and distance education graduates, seem to be more effective teachers than their counterparts in teacher colleges or than untrained teachers. Both colleges of education and distance education programs the result of recent innovations may show the results of a newer curriculum emphasizing the application of teaching techniques and methods informed by recent research on effective schools.

Finally, pupil achievement seems to be higher for those pupils of trained teachers and not so for those of their untrained counterparts. This seems to indicate that what the teacher does in the classroom seems to have a positive effect in the students learning. Although is very hard to establish this link (it is not possible to be sure that teacher education alone makes a difference in student learning, the study collected information in intermediate links such as teacher behavior in the classroom.

Policy implications.

The pre-service approach seems to be quite effective in Sri Lanka and seems to fulfill the purposes of the reform on teacher education -to educate a whole teacher-, however the feasibility of this approach over an extended period of time with a sustained level of quality seems unlikely. This approach is quite expensive and assumes a high level of qualifications from the students. As the number of untrained teachers diminishes a pre-service approach to teacher education needs to be implemented. The generalization of the present pre-service approach, however, would defeat the very attributes that make it successful and attractive: its exclusivity. The present attempt at teacher

training sets a precedent for the character that pre-service may take in the future. An additional accomplishment of the reform on this approach, is the impact that it seeks to have in poor communities by providing incentives and higher salaries, and requiring a three year service in difficult schools from graduates of this program. The strategy of training young, energetic, and well prepared teachers to serve in difficult schools seems to be a serious step in the effort to improve the quality of primary education in poor areas of the country.

Distance education seems to be the most effective approach to train teachers when the costs are also considered. This in-service approach however seem to do better in terms of reinforcing and imparting pedagogy whereas knowledge of subject matter seems to be less stressed. This program seems to show that learning while doing with strong support of tutors and constant dialog with fellow teachers, brings about a program that seems to prepare effective teachers.

Teacher colleges seems to be the less adequate approach both in terms of effectiveness and costs. The antiquated curriculum and methods of teaching plus the residential character of the program makes it quite costly. Since this study was carried out, the program was reduced to only two years of course work. Without supervised practice it is unlikely that these experienced teachers can perform at the level of their counterparts in other two programs studied.

Teacher education in Sri Lanka seems to be more effective when:

- o It combines selection and recruitment strategies to bring excellent qualified people to be trained.
- o Uses updated knowledge and teaching techniques that research has proven effective in previous attempts to educate teachers.
- o Teacher education programs make an effort to integrate their curriculum with the community where the teachers will work, providing them with good understandings of this context.
- o Graduates are well prepared in subject matter or the program has a strong subject matter component.
- o There is frequent interaction between what is being learned and what is applied in the classroom, either through supervised practice or through constant visits to the classroom.
- o When teachers develop collegiality with other teachers who are themselves undergoing training such as the case of distance education through the regional centers.

Finally all these three approaches must be seen in its own merits. As mentioned in the key findings, each approach has valuable knowledge to contribute to the field of teacher education in Sri Lanka. A combination of the best features found in each of the approaches may contribute to the development of a truly indigenous approach to teacher education likely to fulfill the societal, economic, and developmental needs of Sri Lanka's educational system.

FACULTY QUESTIONNAIRE

The Faculty Questionnaire was designed with the purpose of gaining a better understanding of the purposes and structure of the teacher education programs from the point of view of the faculty.

The Questionnaire is divided into six sections: 1) general information about the program, 2) program goals, 3) program structure, 4) information about the students, 5) individual role of faculty member, and 6) views of teaching and learning to teach. There are seventy-eight questions in the questionnaire. Twenty-eight faculty members from Teacher Colleges, College of Education, and Distance Education are interviewed. The primary analyses of the Faculty Questionnaire is based on the frequencies of each question answered by the faculty members.

1. General information about the program

1. Who makes the decisions about this program's goals?

1. The officers in the MOE ()
2. The officers in the NIE ()
3. The director of the program ()
4. A board of directors ()
5. The director of the program along with
department chairs ()
6. The director of the program along with faculty ()
7. Other, which? ()

Q1 In making decisions about the program's goals, Teacher Colleges considered the officers in the MOE play the most important role. College of Education considered Officers in the MOE, officers in NIE, and director of the program as most important. Distance Education considered officers in the MOE, officers in the NIE, director of the program, and the board of directors as important. All three programs agree that the officers in the MOE play the most important role. The officers in the NIE and the director of the program are considered the most important factors in the decision making process by College of Education and Distance Education, but not so in the Teacher Colleges. Board of directors is considered important only by Distance Education.

Q1	COUNT	PRG				ROW TOTAL
		1	2	3	4	
Q01	6	5	6		17	
Q012	0	5	6		11	
Q013	0	4	2		6	
Q014	0	0	4		4	
Q015	0	1	0		1	
Q016	1	3	1		5	
Q017	1	0	0		1	
COLUMN TOTAL	7	10	11		28	
	25.0	35.7	39.3		100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

28 VALID CASES

0 MISSING CASES

250

2. Who makes the decisions about this program's curriculum?

1. The officers in the MOE ()
2. The officers in the NIE ()
3. The director of the program ()
4. A board of directors ()
5. The director of the program along with department chairs ()
6. The director of the program along with faculty ()
7. Other, which? ()

Q2. In making decisions about the program's curriculum, Teacher Colleges considered the officers in the MOE and board of directors play the most important role. College of Education considered Officers in the MOE ,the officers in NIE, and the director of the program along with faculty as most important. Distance Education considered officers in the MOE, officers in the NIE, director of the program, and the board of directors as important. All three programs agree that the officers in the MOE play the most important role. The officers in the NIE and the director of the program are considered the most important factors in the decision making process by College of Education and Distance Education, but not so in the Teacher Colleges. The director of the program along with faculty is considered important only by College of Education.

Q2	COUNT	PRG			ROW TOTAL
		1	2	3	
Q021	6	3	5	14	
Q022	0	4	6	10	
Q023	1	0	0	1	
Q024	2	2	3	7	
Q025	0	2	1	3	
Q026	0	4	1	5	
Q027	1	0	0	1	
COLUMN TOTAL	7	10	10	27	
	25.9	37.0	37.0	100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

27 VALID CASES

1 MISSING CASES

280

3. Who makes the decisions about this program's hiring policies?

1. The officers in the MOE ()
2. The officers in the NIE ()
3. The director of the program ()
4. A board of directors ()
5. The director of the program along with department chairs ()
6. The director of the program along with faculty ()
7. Other, which? ()

Q3. In making decisions about the program's hiring policies, Teacher Colleges considered the officers in the MOE and the director of the program play the most important role. College of Education considered Officers in the MOE, the officers in NIE, and the director of the program along with faculty as most important. Distance Education considered officers in the MOE, officers in the NIE, director of the program, and the board of directors as important. All three programs agree that the officers in the MOE play the most important role. The officers in the NIE and the director of the program are considered the most important factors in the decision making process by College of Education and Distance Education, but not so in the Teacher Colleges. The director of the program along with faculty is considered important only by College of Education. Board of Directors is considered important only by Distance Education.

Q3	COUNT	PRG						ROW TOTAL
		I	I	I	I	I	I	
Q031		7	7	4				18
Q032		0	3	6				9
Q033		1	1	0				2
Q034		0	0	3				3
Q035		0	0	2				2
Q036		0	2	0				2
Q037		2	1	0				3
COLUMN TOTAL		7	10	11				28
		25.0	35.7	39.3				100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

28 VALID CASES

0 MISSING CASES

296

4. Who makes the decisions about student's admission policies?

- 1. The officers in the MOE ()
- 2. The officers in the NIE ()
- 3. The director of the program ()
- 4. A board of directors ()
- 5. The director of the program along with department chairs ()
- 6. The director of the program along with faculty ()
- 7. Other, which? ()

Q4. In making decisions about student's admission policies, Teacher Colleges considered the officers in the MOE and the director of the program play the most important role. College of Education considered Officers in the MOE ,the officers in NIE, director of the program, and the director of the program along with faculty as most important. Distance Education considered officers in the MOE, officers in the NIE, director of the program, and the board of directors as important. All three programs agree that the officers in the MOE play the most important role. The officers in the NIE and the director of the program are considered the most important factors in the decision making process by College of Education and Distance Education, but not so in the Teacher Colleges. The director of the program along with faculty is considered important only by College of Education and Distance Education. Board of Directors is considered important only by Distance Education.

6/1/80

Q4	COUNT	PRG						ROW TOTAL
		1	2	3	4	5	6	
Q041	7	7	8				22	
Q042	0	2	4				6	
Q043	1	2	0				3	
Q044	0	0	3				3	
Q046	0	2	1				3	
COLUMN TOTAL	7	10	11				28	
	25.0	35.7	39.3				100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

28 VALID CASES

0 MISSING CASES

5. Who makes the decisions about program plans and administration?

1. The officers in the MOE ()
2. The officers in the NIE ()
3. The director of the program ()
4. A board of directors ()
5. The director of the program along with faculty ()
6. Other, which? ()

Q5. In making decisions about program's plans and administration, Teacher Colleges considered the officers in the MOE and the director of the program play the most important role. College of Education considered Officers in the MOE ,the officers in NIE, director of the program, and the director of the program along with faculty as most important. Distance Education considered officers in the MOE, officers in the NIE, director of the program, and the board of directors as important. All three programs agree that the officers in the MOE play the most important role. The officers in the NIE and the director of the program are considered the most important factors in the decision making process by College of Education and Distance Education, but not so in the Teacher Colleges. Board of Directors is considered important by Distance Education.

Q5	COUNT	PRG			ROW TOTAL
		1	2	3	
Q051	5	6	3	14	
Q052	0	3	4	7	
Q053	2	1	2	5	
Q054	1	0	6	7	
Q055	1	1	1	3	
Q056	1	2	1	4	
COLUMN TOTAL	7	10	11	28	
	25.0	35.7	39.3	100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

28 VALID CASES

0 MISSING CASES

208

6. Who makes the decisions about program finances and budget allocation?

- 1. The officers in the MOE ()
- 2. The officers in the NIE ()
- 3. The director of the program ()
- 4. A board of directors ()
- 5. The director of the program along with faculty ()
- 6. Other, which? ()

Q6. In making decisions about program's finances and budget allocation, both Teacher Colleges and College of Education agree that the officers in the MOE play the most important role. On the other hand, the officers in the NIE and the board of directors are considered the most important factors in the decision making process by Distance Education.

COUNT	PRG			ROW TOTAL
	1	2	3	
Q061	7	9	1	17
Q062	0	1	7	8
Q063	0	1	0	1
Q064	0	0	2	2
Q066	0	1	0	1
COLUMN TOTAL	7	10	10	27
	25.9	37.0	37.0	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

27 VALID CASES

1 MISSING CASES

207

8. Who holds primary responsibilities in different areas of the program/department?

- 1. The director of the program ()
- 2. The underdirector of the program ()
- 3. The department chair ()
- 4. Area coordinators ()
- 5. Faculty ()
- 6. Other, which? _____ ()

Q8 Concerning the primary responsibilities in different areas of the program/department, Teacher Colleges considered the director of the program, the department chair, and the faculty as most important. College of Education considered the director of the program, the underdirector, the department chair, and area coordinators as important. Distance education considered the director of the program and the department chair as important. College of Education and Distance Education consider the director of the program as most important, whereas Teacher Colleges consider faculty as most important.

Q8	COUNT	PRG						ROW TOTAL
		I	I	1	I	2	I	
Q081	I	2	I	6	I	8	I	16
	I		I		I		I	59.3
Q082	I	0	I	3	I	0	I	3
	I		I		I		I	11.1
Q083	I	2	I	3	I	2	I	7
	I		I		I		I	25.9
Q085	I	4	I	4	I	1	I	9
	I		I		I		I	33.3
Q086	I	0	I	2	I	0	I	2
	I		I		I		I	7.4
COLUMN TOTAL		7		10		10		27
		25.9		37.0		37.0		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

27 VALID CASES

1 MISSING CASES

29

10. Does the program/department have committees for: (Mark with an "X" all that apply)

- 1. Curriculum ()
- 2. Student selection ()
- 3. Examinations ()
- 4. Awarding a diploma or certificate? ()
- 5. Setting program goals ()
- 6. Other, which? _____ ()

Q10. All three programs have committees for curriculum, student selection, examinations, awarding a diploma or certificate, and setting program goals. Teacher Colleges has most committees for curriculum, student selection, and examinations. College of Education has most committees on curriculum and examinations. Distance Education has most committees on curriculum and examinations.

Q10	COUNT	PRG						ROW TOTAL	
		I	I	1	I	2	I		3
Q101		I	3	I	8	I	11	I	22
		I		I		I		I	78.6
Q102		I	3	I	2	I	7	I	12
		I		I		I		I	42.9
Q103		I	5	I	7	I	10	I	22
		I		I		I		I	78.6
Q104		I	1	I	2	I	3	I	6
		I		I		I		I	21.4
Q105		I	1	I	0	I	7	I	8
		I		I		I		I	28.6
Q106		I	1	I	1	I	0	I	2
		I		I		I		I	7.1
	COLUMN TOTAL		7		10		11		28
			25.0		35.7		39.3		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

28 VALID CASES

0 MISSING CASES

299

11. How do you or the program decide what is relevant to teach teachers?
Please mark with an "X" all that apply.

This decision is based on:

1. The content of the examinations that these teachers have to pass ()
2. The stated needs of the country ()
3. Guidelines provided by the MOE ()
4. Guidelines provided by the government ()
5. Current research in teacher education ()
6. Input from the local community ()
7. Input from the international community ()
8. Input from students ()
9. Input from others ()
10. The people in the program decide what to teach (director, faculty, chair of department, etc.) ()
11. The Board of directors ()
12. Other, which? ()

Q11. In making decision on what is relevant to teach teachers, Teacher colleges consider the content of the examinations that teachers have to pass, guidelines provided by the MOE, and current research in teacher education as most important. College of Education consider the stated needs of the country, current research in teacher education, and the people in the program decide what to teach as important. Distance education consider the content of the examination that these teachers have to pass, the guidelines provided by the MOE, and the people in the program decide what to teach as important. In general, the content of the examinations and the guidelines provided by the MOE are considered as important.

COUNT	PRG			ROW TOTAL
	1	2	3	
Q111	5	5	8	18 64.3
Q112	1	6	5	12 42.9
Q113	7	4	8	19 67.9
Q114	3	6	3	12 42.9
Q115	1	2	3	6 21.4
Q116	0	1	2	3 10.7
Q117	2	2	2	6 21.4
Q119	2	6	7	15 53.6
COLUMN TOTAL	7 25.0	10 35.7	11 39.3	28 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

28 VALID CASES

0 MISSING CASES

201

Q12. Concerning the department's view about teaching strategies, the four strategies considered as most favorable are grouping, design and use of instructional materials, awareness of the role that teacher expectations have on student achievement and punctuality. The least favorable are the use of textbooks and homework assignments. Most faculty are neutral concerning estimating cooperative learning among students, emphasis in student discipline, and preparation of weekly teaching plans.

1. Grouping

Favorable () Neutral () Unfavorable ()

COUNT	PRG				ROW TOTAL
	I	II	2I	3I	
Q1201	1	3	8	10	21
	2	4	2	1	7
COLUMN TOTAL	7	10	11	28	100.0

NUMBER OF MISSING OBSERVATIONS = 0

2. Use of textbooks

Favorable () Neutral () Unfavorable ()

COUNT	PRG				ROW TOTAL
	I	II	2I	3I	
Q1202	1	1	2	7	10
	2	5	7	2	14
	3	1	1	2	4
COLUMN TOTAL	7	10	11	28	100.0

NUMBER OF MISSING OBSERVATIONS = 0

3. Homework assignments

Favorable () Neutral () Unfavorable ()

COUNT	PRG			ROW TOTAL
	I	II	2I	
Q1203				
1	3	4	7	14
				51.9
2	4	4	2	10
				37.0
3		2	1	3
				11.1
COLUMN TOTAL	7	10	10	27
	25.9	37.0	37.0	100.0

NUMBER OF MISSING OBSERVATIONS = 1

4. Setting instructional goals

Favorable () Neutral () Unfavorable ()

COUNT	PRG			ROW TOTAL
	I	II	2I	
Q1204				
1	2	5	8	15
				55.6
2	5	4	1	10
				37.0
3		1	1	2
				7.4
COLUMN TOTAL	7	10	10	27
	25.9	37.0	37.0	100.0

NUMBER OF MISSING OBSERVATIONS = 1

2011

7. Design and use of instructional materials

Favorable () Neutral () Unfavorable ()

COUNT	PRG				ROW TOTAL
	I	II	2I	3I	
Q1205	1	5	5	9	19
	2	2	5	2	9
COLUMN TOTAL	7	10	11	28	100.0

NUMBER OF MISSING OBSERVATIONS = 0

9. Classroom management techniques

Favorable () Neutral () Unfavorable ()

COUNT	PRG				ROW TOTAL
	I	II	2I	3I	
Q1207	1	2	4	9	15
	2	5	6	1	12
	3			1	1
COLUMN TOTAL	7	10	11	28	100.0

NUMBER OF MISSING OBSERVATIONS = 0

10. Emphasis in student discipline

Favorable () Neutral () Unfavorable ()

COUNT	PRG			ROW TOTAL
	1	2	3	
1	1	6	5	12
2	6	4	6	16
COLUMN TOTAL	7	10	11	28
	25.0	35.7	39.3	100.0

NUMBER OF MISSING OBSERVATIONS = 0

11. Knowledge and involvement in community development activities

Favorable () Neutral () Unfavorable ()

COUNT	PRG			ROW TOTAL
	1	2	3	
1	6	4	3	13
2	1	5	7	13
3	1	1	1	3
COLUMN TOTAL	7	10	11	28
	25.0	35.7	39.3	100.0

NUMBER OF MISSING OBSERVATIONS = 0

305

12. Preparation of weekly teaching plans

Favorable () Neutral () Unfavorable ()

COUNT	PRG				ROW TOTAL	
	I	I	I	I		
		1I	2I	3I		
Q1210	1	I	I	I	I	9
		I	I	I	I	32.1
	2	I	I	I	I	16
		I	I	I	I	57.1
	3	I	I	I	I	3
		I	I	I	I	10.7
COLUMN TOTAL		7	10	11		28
		25.0	35.7	39.3		100.0

NUMBER OF MISSING OBSERVATIONS = 0

13. Awareness of the role that teacher expectations have on student achievement

Favorable () Neutral () Unfavorable ()

COUNT	PRG				ROW TOTAL	
	I	I	I	I		
		1I	2I	3I		
Q1211	1	I	I	I	I	18
		I	I	I	I	64.3
	2	I	I	I	I	8
		I	I	I	I	28.6
	3	I	I	I	I	2
		I	I	I	I	7.1
COLUMN TOTAL		7	10	11		28
		25.0	35.7	39.3		100.0

NUMBER OF MISSING OBSERVATIONS = 0

15. Punctuality.

Favorable () Neutral () Unfavorable ()

COUNT	PRG				ROW TOTAL
	I	I	I	I	
Q1212	I	I	I	I	
	I	1I	2I	3I	
1	I	1 I	5 I	6 I	12
	I	I	I	I	42.9
2	I	6 I	4 I	4 I	14
	I	I	I	I	50.0
3	I	I	1 I	1 I	2
	I	I	I	I	7.1
COLUMN TOTAL	7	10	11	28	
	25.0	35.7	39.3	100.0	

NUMBER OF MISSING OBSERVATIONS = 0

13. Are the teachers you train expected to participate in:

1. Shramadana activities

Yes ()
No ()

2. Organizing and assisting religious, cultural activities,

Yes ()
No ()

3. Negotiate for material, financial, school facilities

Yes ()
No ()

4. Educate parents, adults, early school leavers in the community.

Yes ()
No ()

Q13. The teachers trained by the faculty are expected to participate in Shramadana activities, organizing and assisting religious, cultural activities, negotiate for material, financial, school facilities, and educate parents, adults, early school leavers in the community. In general, the two most important activities are Shramadana activities and organizing and assisting religious, cultural activities.

Q13 (TABULATING 1)
BY PRG

Q13	COUNT	PRG			ROW TOTAL
		1	2	3	
Q131	7	10	8	25	
Q132	7	10	8	25	
Q133	5	7	4	16	
Q134	2	6	1	9	
COLUMN TOTAL	7	10	9	26	
	26.9	38.5	34.6	100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

26 VALID CASES

2 MISSING CASES

19. What is the higher educational level you have achieved?

- 1. EdD, PhD, or other doctorate. ()
- 2. MA, MS, or other master degree ()
- 3. BA or other undergraduate level ()
- 4. No formal degree ()
- 5. Diploma ()
- 6. Certificate ()
- 7. Other, _____ ()

Q19. Most of the faculty interviewed have master degree, BA, diploma, or certificate. There are most people with master degree in College of Education, and there are two of them reported they have no formal degree in Distance education.

Q19 (TABULATING 1)
BY PRG

Q19	COUNT	PRG			ROW TOTAL
		1	2	3	
Q192	2	6	1	9	
Q193	3	2	4	9	
Q194	0	0	2	2	
Q195	3	2	2	7	
Q196	3	1	5	9	
COLUMN TOTAL	7	10	11	28	
	25.0	35.7	39.3	100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

28 VALID CASES

0 MISSING CASES

2. Program Goals

21. How would you characterize your program?

It is a program that provides:

- 1. Pre-service training ()
- 2. In-service training ()
- 3. In-service/distance training ()
- 4. In-service including practice training (NIE) ()
- 5. Other, which? _____ ()

Q21. Teacher Colleges will characterize themselves as in-service training, College of Education as pre-service training, and Distance Education as In-service/distance training.

COUNT	PRG				ROW TOTAL
	1	2	3	4	
Q21					
		1	2	3	
1	10				10
	35.7				
2		7		1	8
		28.6			
3			10		10
			35.7		
COLUMN TOTAL	25.0	35.7	39.3	28	100.0

NUMBER OF MISSING OBSERVATIONS = 0

25. Is there an overall theme or purpose to the program?

Answer with an "X" more than one alternative if applicable.

The purpose is to train elementary school teachers in:

1. General skills and knowledge needed to teach primary school. ()
2. Pedagogical skills needed to teach. ()
3. Specific knowledge of subject matter needed to teach subjects such as math, language, writing, etc. ()
4. Classroom management strategies needed in the classroom. ()
5. Help them perfect the skills they have already acquired through their teaching. ()
6. The purpose of the program is to provide teachers with certification so that they could move up in the educational structure. ()
7. Conceptual, pedagogical, and practical teaching skills that are relevant to the rural or urban communities where they teach. ()
8. Other, explain _____ ()

Q25. Concerning an overall theme to the program, Teacher Colleges and Distance education consider all the seven purposes as important. College of Education agree with all but two of them: Helping them perfect the skills they have already acquired through their teaching, and the purpose of the program is to provide teachers with certification so that they could move up in the educational structure. In general, the two most important purposes are general skills and knowledge needed to teach primary school, and pedagogical skills needed to teach.

Q25 (TABULATING 1)
BY PRG

Q25	PRG			ROW TOTAL
	COUNT	1	2	
Q251	6	10	9	25 89.3
Q252	5	5	9	19 67.9
Q253	5	4	7	16 57.1
Q254	5	3	8	16 57.1
Q255	5	0	8	13 46.4
Q256	5	0	2	7 25.0
Q257	5	3	7	15 53.6
Q258	2	1	1	4 14.3
COLUMN TOTAL	7	10	11	28 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

28 VALID CASES

0 MISSING CASES

312

26. More specifically, what goals is the program trying to accomplish?

1. Fullfil country needs for qualified teachers. ()
2. Respond to the urgent demand for teachers
existent in the country. ()
3. Update teachers knowledge of teaching. ()
4. Update teacher's knowledge of subject matter. ()
5. Update teacher's knowledge of pedagogical
techniques and teaching methods. ()
6. Improve or modify teacher's teaching styles. ()
7. Provide teachers with the required knowledge
and abilities needed to teach. ()
8. Provide teachers with context relevant teaching
techniques that will allow them to successfully
9. Certify a large number of teachers ()
teach children Sri Lankan ways. ()
10. Other, _____ ()

Q26. Concerning the goals of the program trying to accomplish, Teacher Colleges and Distance Education consider all the nine goals as important. College of Education agree with all but one of them: improve or modify teacher's teaching styles. In general, the two most important goals are fullfil country needs for qualified teachers and to provide teachers with context relevant needs for teaching techniques that will allow them to teach successfully. Teacher College considers provide teachers with context relevant teaching techniques that will allow them to teach successfully as most important. College of Education considers fullfil country needs for qualified teachers as most important. Distance Education considers update teacher's knowledge of pedagogical techniques and teaching methods as most important.

Q26 (TABULATING 1)
 BY PRG

Q26	PRG						ROW TOTAL
	COUNT	1	2	3			
Q261	6	9	9				24 85.7
Q262	4	1	4				9 32.1
Q263	5	4	8				17 60.7
Q264	5	2	6				13 46.4
Q265	5	3	10				18 64.3
Q266	6	0	8				14 50.0
Q267	6	7	9				22 78.6
Q268	7	8	9				24 85.7
Q269	5	2	7				14 50.0
Q2610	0	1	2				3 10.7
COLUMN TOTAL	7	10	11				28 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

28 VALID CASES

0 MISSING CASES

314

27. How is the program trying to accomplish these goals?
Please mark with an "x" all that apply.

1. By facilitating the entrance to the program
to all those teachers who desire further training. ()
2. By restricting the entrance to the program to those
teachers who have shown excellence in their teaching
and in their previous studies. ()
3. By carefully designing the curriculum and courses
that contribute to a better understanding of
teaching and the teaching profession. ()
4. By providing the students/teachers the opportunity
to apply what they are learning through supervised
practice or through a similar strategy. ()
5. By recruiting the most qualified faculty to teach
in the program. ()
6. By providing the teachers with courses and
opportunities to understand their role in the
broader context of society. ()
7. By encouraging teachers to develop those personal
skills that make for successful teaching. ()
8. By providing teachers with a solid academic
preparation in subject matter. ()
9. Other, which? _____ ()

Q27. Concerning how the program trying to accomplish these goals, College of Education agrees with all the choices. Both Teacher Colleges and Distance Education agree with all but one: by restricting the entrance to the program to those teachers who have shown excellence to their teaching and in their previous studies. In general, by providing the students/teachers the opportunity to apply what they are learning through supervised practice or through a similar strategy, and by encouraging teachers to develop those personal skills that make for successful teaching are considered the most important actions.

Q27 (TABULATING 1)
BY PRG

		PRG							
COUNT		I	I	I	I	I	I	ROW	
			1	2	3			TOTAL	
Q27	Q271	I	2	I	1	I	2	I	5
		I		I		I		I	17.9
Q272	Q272	I	0	I	3	I	0	I	3
		I		I		I		I	10.7
Q273	Q273	I	5	I	6	I	8	I	19
		I		I		I		I	67.9
Q274	Q274	I	6	I	6	I	10	I	22
		I		I		I		I	78.6
Q275	Q275	I	1	I	5	I	0	I	6
		I		I		I		I	21.4
Q276	Q276	I	4	I	3	I	5	I	12
		I		I		I		I	42.9
Q277	Q277	I	7	I	5	I	10	I	22
		I		I		I		I	78.6
Q278	Q278	I	5	I	2	I	6	I	13
		I		I		I		I	46.4
Q279	Q279	I	0	I	0	I	1	I	1
		I		I		I		I	3.6
COLUMN			7		10		11		28
TOTAL			25.0		35.7		39.3		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

28 VALID CASES

0 MISSING CASES

28. Of the goals that you have mentioned (and of the ones included in the list), are there any that you feel the program is particularly successful in achieving? Mark with an "x" all that apply.

1. Fullfil country needs for qualified teachers.

Very successful ()
 Moderately successful ()
 Unsuccessful ()

COUNT	PRG				ROW TOTAL
	I	II	2I	3I	
Q281	-----	-----	-----	-----	
1	I I I I	I I	I I	I I	7
	I I I I	I I	I I	I I	25.0
2	I I I I	I I I I	I I I I	I I I I	21
	I I I I	I I I I	I I I I	I I I I	75.0
COLUMN TOTAL	7	10	11	28	100.0

NUMBER OF MISSING OBSERVATIONS = 0

2. Respond to the urgent demand for teachers existent in the country.

Very successful ()
 Moderately successful ()
 Unsuccessful ()

COUNT	PRG				ROW TOTAL
	I	II	2I	3I	
Q282	-----	-----	-----	-----	
1	I I I I	I I	I I	I I	2
	I I I I	I I	I I	I I	8.3
2	I I I I	I I I I	I I I I	I I I I	22
	I I I I	I I I I	I I I I	I I I I	91.7
COLUMN TOTAL	6	10	8	24	100.0

NUMBER OF MISSING OBSERVATIONS = 4

3. Update teachers knowledge of teaching.

Very successful ()
 Moderately successful ()
 Unsuccessful ()

COUNT	PRG				ROW TOTAL
	I	II	2I	3I	
Q283	-----				
1	I	I I	I I	I I	6
	I	I	I	I	23.1
2	I	I I	I I	I I	20
	I	I	I	I	76.9
COLUMN TOTAL	6	9	11	26	100.0
	23.1	34.6	42.3		

NUMBER OF MISSING OBSERVATIONS = 2

4. Update teacher's knowledge of subject matter.

Very successful ()
 Moderately successful ()
 Unsuccessful ()

COUNT	PRG				ROW TOTAL
	I	II	2I	3I	
Q284	-----				
1	I	I I	I I	I I	7
	I	I	I	I	28.0
2	I	I I	I I	I I	17
	I	I	I	I	68.0
3	I	I	I I	I	1
	I	I	I	I	4.0
COLUMN TOTAL	5	9	11	25	100.0
	20.0	36.0	44.0		

NUMBER OF MISSING OBSERVATIONS = 3

5. Update teacher's knowledge of pedagogical techniques and teaching methods.

Very successful ()
Moderately successful ()
Unsuccessful ()

Q285	COUNT	PRG				ROW TOTAL		
		I	II	2I	3I			
1	I	3	I	4	I	3	I	10
			I		I		I	37.0
2	I	3	I	6	I	8	I	17
			I		I		I	63.0
	COLUMN TOTAL	6	10	11	27			
		22.2	37.0	40.7	100.0			

NUMBER OF MISSING OBSERVATIONS = 1

6. Improve or modify teacher's teaching styles.

Very successful ()
Moderately successful ()
Unsuccessful ()

Q286	COUNT	PRG				ROW TOTAL		
		I	II	2I	3I			
1	I	1	I	1	I	2	I	4
			I		I		I	14.8
2	I	5	I	9	I	9	I	23
			I		I		I	85.2
	COLUMN TOTAL	6	10	11	27			
		22.2	37.0	40.7	100.0			

NUMBER OF MISSING OBSERVATIONS = 1

7. Provide teachers with the required knowledge and abilities needed to teach.

Very successful ()
 Moderately successful ()
 Unsuccessful ()

COUNT	PRG			ROW TOTAL	
	I	1I	2I		3I
Q287	I	I	I		
1	I	4 I	3 I	2 I	9
	I	I	I	I	33.3
2	I	2 I	7 I	9 I	18
	I	I	I	I	66.7
COLUMN TOTAL	6	10	11	27	100.0

NUMBER OF MISSING OBSERVATIONS = 1

8. Other, _____

Very successful ()
 Moderately successful ()
 Unsuccessful ()

COUNT	PRG			ROW TOTAL	
	I	1I	2I		3I
Q288	I	I	I		
1	I	I	2 I	I	2
	I	I	I	I	22.2
2	I	1 I	4 I	1 I	6
	I	I	I	I	56.7
3	I	1 I	I	I	1
	I	I	I	I	11.1
COLUMN TOTAL	2	6	1	9	100.0

NUMBER OF MISSING OBSERVATIONS = 19

Q28. In concerning achieving the goals, the two goals that are considered as most successful are update teacher's knowledge of pedagogical techniques and teaching methods, and provide teachers with the required knowledge and abilities needed to teach. The programs are neutral on respond to the urgent demand for teachers existent in the country, and improve or modify teacher's teaching styles. In general, the faculty consider the program as successful in achieving the goals.

29. How do you explain the degree of program success? Mark with an "X" all that apply.

1. The program has well defined goals ()
2. The program has a careful designed plan to follow for training teachers. ()
3. The program receives the adequate financial support ()
4. The program has the adequate resources ()
5. The program has political support ()
6. The program has been recognized as providing high quality teacher training. ()
7. The program keeps up with the latest research in the field about effective teachers. ()
8. The curriculum is flexible and allows for changes according to the recent research and the needs of students and teachers in Sri Lanka. ()
9. The staff in the program has achieved a strong sense of what the program is all about. ()
10. Other, which? _____ ()

Q29. College of Education and Distance Education agree on all of the reasons in the explanation of program success. Teacher College agree on all but four of them: The program receives the adequate financial support, the program has the adequate resources, the program has political support, and the program keeps up with the latest research in the field about effective teachers. In general, the most important reasons are the program has well defined goals, the program has been recognized as providing high quality teacher training, and the staff in the program has achieved a strong sense of what the program is all about.

Q29 (TABULATING 1)
BY PRG

Q29	COUNT	PRG			ROW TOTAL
		1	2	3	
Q291	5	9	10	24	
Q292	4	8	7	19	
Q293	0	3	7	10	
Q294	0	4	1	5	
Q295	0	2	3	5	
Q296	4	8	8	20	
Q297	0	3	6	9	
Q298	2	6	8	16	
Q299	5	7	8	20	
Q2910	1	1	0	2	
COLUMN TOTAL	7	10	11	28	
	25.0	35.7	39.3	100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

28 VALID CASES

0 MISSING CASES

322

30. To what extent is there agreement among the participants about the goals of the program?

1. In general, everybody agrees ()
2. There is often agreement with the direction of the program ()
3. There is often disagreement among the junior and the senior faculty in the program ()
4. There is general disagreement about the goals of program. ()
5. The goals are unclear and diffuse and it is hard to tell whether there is agreement or not. ()
6. There is enough flexibility in the program for the faculty freely teach what they think is best. ()
7. Other, which? _____ ()

Q30. In concerning the extent there is agreement among the participants about the goals of the program, the two most chosen ones are: in general, everybody agrees and there is often agreement with the direction of the program. They also agree that there is enough flexibility in the program for the faculty freely teach what they think is best.

Q30 (TABULATING 1)
BY PRG

Q30	COUNT	PRG			ROW TOTAL
		1	2	3	
Q301	6	8	7	21	
Q302	4	2	9	15	
Q303	0	2	0	2	
Q304	0	4	1	5	
Q305	1	1	0	2	
Q306	0	6	5	11	
Q307	0	1	0	1	
COLUMN TOTAL	7	10	11	28	
	25.0	35.7	39.3	100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

28 VALID CASES

0 MISSING CASES

31. What accounts for this level of agreement?

1. Clear goals. ()
2. Weekly meetings with the staff where the goals of the different courses are revised or discussed. ()
3. Frequent communication with the students ()
4. Frequent communication with the director of the program or with the coordinator of the courses. ()
5. Frequent communication with the MOE ()
6. Other, which? _____ ()

Q31. The faculty members from all three programs consider clear goals and frequent communication with the director of the program or with the coordinator of the courses are the most important reasons accounts for this level of agreement.

Q31 (TABULATING 1)
BY PRG

Q31	COUNT	PRG			ROW TOTAL
		1	2	3	
Q311	6	3	8	17	
Q312	0	2	1	3	
Q313	1	1	7	9	
Q314	2	5	9	16	
Q315	1	2	1	4	
Q316	1	1	1	3	
COLUMN TOTAL	7	9	11	27	
	25.9	33.3	40.7	100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

27 VALID CASES

1 MISSING CASES

2/26

32. Is there agreement among the participants (faculty/director/staff) about the following aspects:? Mark with an "X" all that apply.

- 1. Program purpose. ()
- 2. Teaching methods used in the program. ()
- 3. The teaching styles that the program advocates for the students/teachers. ()
- 4. Curriculum content. ()
- 5. Teaching practice for the students. ()
- 6. Other learning opportunities for the students ()
- 7. Other, which? _____ ()

Q32. Concerning the agreement among the participants, College of Education and Distance Education agree on all the choices. In general, the two areas that have the most agreement are teaching methods used in the program and teaching practice for the students.

Q32 (TABULATING 1)
BY PRG

Q32	COUNT	PRG						ROW TOTAL
		1	2	3	4	5	6	
Q321	7	6	9				22	
							78.6	
Q322	6	8	9				23	
							82.1	
Q323	4	4	8				16	
							57.1	
Q324	6	7	8				21	
							75.0	
Q325	7	9	9				25	
							89.3	
Q326	4	3	3				10	
							35.7	
Q327	0	1	0				1	
							3.6	
	COLUMN TOTAL	7	10	11			28	
		25.0	35.7	39.3			100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

28 VALID CASES

0 MISSING CASES

33. What factors work against attainment of program goals? Mark with an "x" all that apply.

1. Bureaucracy, excessive paper work that distracts from focus on the curriculum and instruction. ()
2. Ministry of education guidelines, and requirements or other institutional guidelines. ()
3. Lack of resources (money and other resources) ()
4. The quality of the students/teachers. ()
5. The quality of the materials used for instruction ()
6. The quality of the faculty. ()
7. The curriculum is old and outdated ()
8. Lack of supervised practice and other similar learning opportunities for the students. ()
9. Distance and other environmental situations ()
10. Other, which? _____ ()

Q33. In concerning the factors work against attainment of programs goals, Teacher Colleges consider the quality of the students/teachers, lack of supervised practice and other similar learning opportunities for the students, and distance and other environmental situations as most important factors. College of Education considers bureaucracy, excessive paper work that distracts from focus on the curriculum and instruction and lack of resources as most important. Distance education considers lack of resources and lack of supervised practice and other similar learning opportunities for th students as most important. In general, lack of resources and lack of supervised practice are the most important factors work against attainment of program goals.

Q33 (TABULATING 1)
BY PRG

		PRG							
Q33	COUNT	I		I		I	ROW		
		I	1	I	2	I	TOTAL		
		I		I		I			
Q331		I	3	I	6	I	5	I	14
		I		I		I		I	50.0
Q332		I	1	I	4	I	2	I	7
		I		I		I		I	25.0
Q333		I	3	I	7	I	10	I	20
		I		I		I		I	71.4
Q334		I	5	I	3	I	5	I	13
		I		I		I		I	46.4
Q336		I	0	I	1	I	1	I	2
		I		I		I		I	7.1
Q337		I	3	I	0	I	4	I	7
		I		I		I		I	25.0
Q338		I	5	I	3	I	8	I	16
		I		I		I		I	57.1
Q339		I	5	I	1	I	7	I	13
		I		I		I		I	46.4
Q3310		I	2	I	3	I	0	I	5
		I		I		I		I	17.9
	COLUMN		7		10		11		28
	TOTAL		25.0		35.7		39.3		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

28 VALID CASES

0 MISSING CASES

3/21

36. If the program was given an extra half year to work with its teacher candidates, what would you add to the curriculum? Mark with an "X" all that apply.

1. Supervised classroom practice ()
2. Methods courses ()
3. Research on teaching and learning courses ()
4. Courses in pedagogical techniques ()
5. Field trips to acquaint with the needs of diverse communities in Sri Lanka ()
6. More training in community development strategies ()
7. Would provide subject matter specific courses (e.g. more courses in math, or language, etc.) ()
8. Would add nothing but will extend the time teachers spend learning how to teach. ()
9. Other, which? _____ ()

Q36. If the program was given an extra half year to work with its teacher candidates, faculty from teacher colleges and College of education will add field trips to acquaint with the needs of diverse communities in Sri Lanka. Distance Education will add supervised classroom practice, method courses, research on teaching and learning courses, and field trips to the programs. In general, supervised classroom practice and field trips are considered the most important.

Q36 (TABULATING 1)
BY PRG

Q36	COUNT	PRG						ROW TOTAL
		1	2	3	4	5	6	
Q361	6	6	8				20	
Q362	3	2	8				13	
Q363	7	5	7				19	
Q364	2	0	4				6	
Q365	7	7	7				21	
Q366	5	4	5				14	
Q367	3	3	2				8	
Q368	2	2	1				5	
Q3610	0	1	0				1	
COLUMN TOTAL	7	10	11				28	
	25.0	35.7	39.3				100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

28 VALID CASES

0 MISSING CASES

201

38. If the program was given extra money or other resources needed to work with its teacher candidates, what would you add to the curriculum?
1. Video equipment ()
 2. Computers ()
 3. Books, and other learning materials ()
 4. Empirical research projects to teach teachers how to learn from their experiences and from their students ()
 5. Field trip requirements for them to learn about the diverse needs of children and their communities in Sri Lanka. ()
 6. Organize simposia, conferences, etc., in which Sri Lankan teachers, practitioners, academics and students will talk about teaching and learning. ()
 7. Other, which? _____ ()

Q38. If the program was given extra money or other resources needed to work with its teacher candidates, teacher college and Distance education will add books, and other learning materials, and to organize simposia, conference. College of Education will organize simposia, conferences. In general. the two most important areas are books and organization of conferences.

Q38 (TABULATING 1)
BY PRG

Q38	PRG			ROW TOTAL
	1	2	3	
Q381	4	1	7	12 42.9
Q382	3	1	3	7 25.0
Q383	7	7	9	23 82.1
Q384	6	7	8	21 75.0
Q385	6	7	7	20 71.4
Q386	7	8	9	24 85.7
Q387	1	0	0	1 3.6
COLUMN TOTAL	7 25.0	10 35.7	11 39.3	28 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

28 VALID CASES

0 MISSING CASES

2/23

3. Program Structure

42. How are outside instructors or faculty selected?

There are not outside instructors selected (), Go to question 44.

They are selected in terms of:

1. Their credentials ()
2. Educational degree (BA or MA or PhD) ()
3. How many years of teaching experience they have ()
4. They are assigned to the program by the MOE ()
5. Other, which? _____ ()

Q42. The two most important criteria in the selection of outside instructors are their credentials and years of experience.

Q42 (TABULATING 1)
BY PRG

Q42	COUNT	PRG						ROW TOTAL	
		I	I	1	I	2	I		3
Q421		I	4	I	6	I	8	I	18
		I		I		I		I	66.7
Q422		I	3	I	6	I	3	I	12
		I		I		I		I	44.4
Q423		I	4	I	9	I	9	I	22
		I		I		I		I	81.5
Q424		I	2	I	4	I	4	I	10
		I		I		I		I	37.0
Q425		I	2	I	1	I	1	I	4
		I		I		I		I	14.8
	COLUMN TOTAL		7		10		10		27
			25.9		37.0		37.0		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

27 VALID CASES

1 MISSING CASES

44. Has your performance been evaluated?

Yes ()

No (), Go to question 45.

If so how?

- 1. Periodic workshops to update teachers knowledge ()
- 2. Supervisors from the MOE observe in the classroom ()
- 3. Frequent interviews or evaluation meetings with the program director ()
- 4. Observations by the program director ()
- 5. Evaluation from peers ()
- 6. Other, which? _____ ()

Q43. The two method most frequently used in the evaluation of the performance are frequent interviews and observations by the program director.

Q432 (TABULATING 1)
BY PRG

Q432	COUNT	PRG			ROW TOTAL
		1	2	3	
Q4321	11	2	2	7	11
Q4322	4	0	0	1	4.0
Q4323	17	5	6	6	17
Q4324	16	4	4	8	16
Q4325	8	3	2	3	8
Q4326	2	0	1	1	2
COLUMN TOTAL		5	9	11	25
		20.0	36.0	44.0	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

25 VALID CASES

3 MISSING CASES

335

4. Students

47. Are there selection criteria for students entering the program?

1. Yes ()
 No (), go to question 49

If yes, please describe these criteria (mark more than one):

2. Level of education, describe _____ ()
 3. Passing an examination, describe _____ ()
 4. Number of years teaching, describe _____ ()
 5. Region of the country where they live _____ ()
 6. Socioeconomic level of the candidate _____ ()
 7. Region of the country where they teach _____ ()
 8. Personality characteristics, describe _____ ()
 9. Grade point average in previous studies _____ ()
 10. Teaching experience is not required _____ ()
 11. Ability to pay tuition _____ ()
 13. Everyone who wants can go into the program _____ ()
 14. Other, which? _____

Q47. There are selection criteria for student entering the program for the three programs. Teacher Colleges considers level of education and years of teaching experiences as most important. College of education considers level of education, passing an examination, and personality characteristics as important. Distance education considers level of education and GPA as most important. In general, level of education and years of teaching experience are considered as most important by the three programs.

Q472 (TABULATING 1)
BY PRG

Q472	PRG				ROW TOTAL
	COUNT	1	2	3	
Q4721	6	10	5		21 75.0
Q4722	1	8	2		11 39.3
Q4723	7	4	3		14 50.0
Q4724	0	2	0		2 7.1
Q4725	0	1	0		1 3.6
Q4726	0	2	4		6 21.4
Q4727	2	8	0		10 35.7
Q4728	0	2	5		7 25.0
Q4729	0	1	0		1 3.6
Q47210	0	0	1		1 3.6
Q47211	4	2	2		8 26.6
COLUMN TOTAL	7	10	11		28 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

28 VALID CASES

0 MISSING CASES

337

52. Personality characteristics:

Most of the students are:

1. Independent ()
 2. Take the initiative ()
 3. Hard working ()
 4. Well educated ()
 5. Interested on others well being ()
 6. Interested in justice ()
 7. Professionals or behave as such ()
 8. Punctual ()
 9. Responsible ()
 10. Lack motivation ()
 11. Procastinate ()
 12. Other, which? _____ ()
 13. Are there other important characteristics
of students entering the program that
should be mentioned? _____
-

Q52. Concerning the personality characteistics of the students, most of the students are considered as indepentent, take the intiative, hardworking, and responsible.

GROUP Q521
(VALUE TABULATED = 1)

DICHOTOMY LABEL	NAME	COUNT	PCT OF RESPONSES	PCT OF CASES
	Q5211	18	11.3	64.3
	Q5212	16	10.1	57.1
	Q5213	17	10.7	60.7
	Q5214	10	6.3	35.7
	Q5215	7	4.4	25.0
	Q5216	15	9.4	53.6
	Q5217	15	9.4	53.6
	Q5218	12	7.5	42.9
	Q5219	16	10.1	57.1
	Q52110	12	7.5	42.9
	Q52111	6	3.8	21.4
	Q52112	15	9.4	53.6
	TOTAL RESPONSES	159	100.0	567.9

0 MISSING CASES

28 VALID CASES

53. Why do think students choose to enter this particular program?

- 1. The only option available ()
- 2. Reputation for quality teacher education ()
- 3. Low cost ()
- 4. Convenient schedule ()
- 5. Reputation of program faculty ()
- 6. The type of diploma or certificate provided by this program. ()
- 7. Other, which? _____ ()

Q53. Concerning the reasons why students choose to enter this particular program, teacher colleges thinks that the type of diploma or certificate provided by this program as most important. College of Education considers the only option available as most important. Distance Education considers low cost as most important. In general, the only option available and the type of diploma provided are considered as most important.

Q53 (TABULATING 1)
BY PRG

Q53	COUNT	PRG			ROW TOTAL
		1	2	3	
Q531	3	7	4	14	
Q532	2	4	4	10	
Q533	0	5	8	13	
Q534	0	0	6	6	
Q535	0	1	1	2	
Q536	6	5	7	18	
Q537	3	5	0	8	
COLUMN TOTAL	7	10	10	27	
	25.9	37.0	37.0	100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

27 VALID CASES

1 MISSING CASES

231

54. What if anything, is done to recruit applicants?

1. A recruiter from the program goes to schools to talk to teachers. ()
2. The MOE recruits the teachers ()
3. Teachers get assigned to the different programs according to past performance, scores on a test or other similar criteria ()
4. There is not recruitment and any kind of teacher can enroll in the program ()
5. Other, which? _____ ()

Q54. In recruiting applicants, the MOE recruits the teachers is the most important source considered by Teacher College. For College of Education and Distance Education, teacher get assigned to the different programs according to past performance, scores on a test or other similar criteria.

Q54 (TABULATING 1)
BY PRG

Q54	COUNT	PRG			ROW TOTAL
		1	2	3	
Q541	4	3	0	7	
Q542	3	5	4	12	
Q543	3	0	3	6	
Q544	1	4	3	8	
COLUMN TOTAL	7	9	9	25	
	28.0	36.0	36.0	100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

25 VALID CASES 3 MISSING CASES

340

55. How does the program decide whether an applicant should be admitted to your program?

Mark all that apply.

1. According to their performance in a national examination they have to pass after finishing high school ()
2. According to an examination that they have to present before becoming teachers ()
3. According to an examination that the program requires before they are admitted ()
4. According to their performance in previous levels of education ()
5. Personal and background characteristics ()
6. According to their performance as teachers (as recorder in evaluations by supervisors) ()
7. Other, which? _____ ()

Q55. In deciding whether an applicant should be admitted to the program, teacher colleges considered performance in a national examination they have to pass after finishing high school and in previous levels of education. College of education considered personal and background characteristics as most important. Distance education considered the performance to an examination that they have to present before becoming teachers. In general, the performance in a national examination and an examination that they have to present before becoming teachers are considered as most important in deciding whether an applicant should be admitted to the program.

Q55 (TABULATING 1)
BY PRG

Q55	COUNT	PRG						ROW TOTAL
		I	I	1	I	2	I	
Q551	I	3	I	5	I	3	I	11
	I		I		I		I	43.7
Q552	I	2	I	6	I	7	I	15
	I		I		I		I	55.6
Q553	I	1	I	3	I	0	I	4
	I		I		I		I	14.8
Q554	I	3	I	3	I	3	I	9
	I		I		I		I	33.3
Q555	I	2	I	7	I	1	I	10
	I		I		I		I	37.0
Q556	I	2	I	0	I	0	I	2
	I		I		I		I	7.4
Q557	I	2	I	2	I	0	I	4
	I		I		I		I	14.8
COLUMN TOTAL		7		10		10		27
		25.9		37.0		37.0		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

27 VALID CASES

1 MISSING CASES

56. Which of the following factors influence a teacher's teaching record?
Mark all that apply.

1. The number of students that repeat ()
2. The number of students that are promoted ()
3. The number of students that drop out ()
4. The number of students that pass the next level exam ()
5. The number of days a teacher is absent from school ()
6. Punctuality ()
7. The level of discipline of his students ()
8. Teacher's teaching style ()
9. Teacher's knowldege of subject matter ()
10. Teacher's personality ()
11. Teacher's qualifications or certificates ()
12. Other, which? _____ ()

Q56. In concerning the factors influence a teacher's teaching record, teacher college and distance education consider the number of days a teacher is absent from school and punctuality are the most important. College of education considers punctuality and teacher's qualifications or certificates as most important. In general, the three factors mentioned above are considered as most important for the three programs.

Q56 (TABULATING 1)
 BY PRG

PAGE 1 OF 2

Q56	PRG	COUNT	PRG			ROW TOTAL
			1	2	3	
Q561		0	0	2	2	7.1
Q562		2	1	6	9	32.1
Q563		0	1	1	2	7.1
Q564		0	1	1	2	7.1
Q565		6	6	11	23	82.1
Q566		6	9	11	26	92.9
Q567		1	5	5	11	39.3
Q568		3	8	9	20	71.4
Q569		5	8	9	22	78.6
Q5610		5	9	9	23	82.1
Q5611		4	5	6	15	53.6
COLUMN TOTAL		7	10	11	28	
		25.0	35.7	39.3	100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

344

65. What other experiences or courses are recommended or desired for the student?

1. Volunteer work in schools ()
2. Observations of fellow teachers ()
3. Observations by fellow teachers ()
4. Period of service in rural schools ()
5. Field experience to understand the needs of the rural areas. ()
6. Courses on awareness of the role of the farmer in Sri Lanka ()
7. Courses on the role of Sri Lanka in the world ()
8. Other, which? _____ ()

Q65. In considering other experiences or courses recommended for the students, teacher colleges considers volunteer work in schools as most important. College of Education considered field experience to understand the needs of the rural areas as most important. Distance education considered observations by fellow teachers as important. In general, observations by fellow teachers, and field experience are considered as most important.

Q65
BY PRG

(TABULATING 1)

Q65	COUNT	PRG			ROW TOTAL
		1	2	3	
Q651	I I I	6 I I	5 I I	5 I I	16 59.3
Q652	I I	4 I	5 I	11 I	20 74.1
Q653	I I	4 I	4 I	10 I	18 66.7
Q654	I I	3 I	5 I	5 I	13 48.1
Q655	I I	7 I	8 I	7 I	22 81.5
Q656	I I	3 I	3 I	5 I	11 40.7
Q657	I I	4 I	3 I	4 I	11 40.7
Q658	I I	0 I	2 I	0 I	2 7.4
COLUMN TOTAL		7 25.9	9 33.3	11 40.7	27 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

27 VALID CASES

1 MISSING CASES

5. Individual Role

67. Could you describe exactly what your role is in the program? What is it that you do?

- | | Percent of your time
% |
|--|---------------------------|
| 1. Teach | — |
| 2. Supervise the working of the program | — |
| 3. Supervise faculty | — |
| 4. Work directly in the curriculum of the program and other academic matters | — |
| 5. Deal directly with the budget and resources of the program | — |
| 6. Sets policy concerning the future of the program | — |
| 7. Other, which? _____ | — |

If you teach, what courses do you teach?

Q67. Teacher College and College of education consider teaching as the most role in the program. Distance education considers set policy concerning the future of the program as most important. In general, teaching, work directly in the curriculum of the program and other academic matters, and setting policy are the most roles of the faculty members.

Q67
BY PRG

(TABULATING 1)

		PRG						
COUNT	I	I	I	I	I	I	I	ROW TOTAL
		1	2	3				
Q67	Q671	7	10	8	I	I	I	25 89.3
	Q672	5	3	1	I	I	I	9 32.1
	Q673	3	2	0	I	I	I	5 17.9
	Q674	5	7	9	I	I	I	21 75.0
	Q675	0	1	0	I	I	I	1 3.6
	Q676	1	2	0	I	I	I	3 10.7
	Q677	5	7	10	I	I	I	22 78.6
	Q678	3	1	1	I	I	I	5 17.9
	COLUMN TOTAL	7	10	11	I	I	I	28 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

28 VALID CASES

0 MISSING CASES

68. What are your specific goals for students? What are the program goals for the students? Mark with an "X" all that apply.

Q68. Concerning the specific goals for students, helping teachers understand how children learn, help teachers understand how they can use research findings in improving their teaching, and to help teacher organize their classroom to estimate learning are considered the most important by the three program. All three programs agree on all the goals listed.

1. That they learn specific subject matter knowledge.

Q6811 (TABULATING 1)
BY PRG

		PRG							
COUNT		I	I	I	I	I	I	ROW	
		I	1	I	2	I	3	TOTAL	
		I	I	I	I	I	I		
Q6811	Q68111	I	4	I	6	I	8	I	18
		I		I		I		I	94.7
	Q68112	I	4	I	4	I	5	I	13
		I		I		I		I	68.4
	COLUMN		4		7		8		19
	TOTAL		21.1		36.8		42.1		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

19 VALID CASES

9 MISSING CASES

2. To help them understand the social and cultural elements of teaching.

Q6812 (TABULATING 1)
BY PRG

		PRG							
COUNT		I	I	I	I	I	I	ROW	
		I	1	I	2	I	3	TOTAL	
		I	I	I	I	I	I		
Q6812	Q68121	I	5	I	4	I	9	I	18
		I		I		I		I	90.0
	Q68122	I	4	I	5	I	6	I	15
		I		I		I		I	75.0
	COLUMN		5		6		9		20
	TOTAL		25.0		30.0		45.0		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

20 VALID CASES

8 MISSING CASES

3. To impart the skills needed to teach all the subjects effectively.

Q6813 (TABULATING 1)
BY PRG

Q6813	COUNT	PRG						ROW TOTAL
		I	I	1	I	2	I	
QC8131	I	5	I	6	I	8	I	19
Q68132	I	6	I	5	I	5	I	16
COLUMN TOTAL		6		8		8		22
		27.3		36.4		36.4		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS
22 VALID CASES 6 MISSING CASES

4. To help teachers to learn how to learn from experiences.

Q6814 (TABULATING 1)
BY PRG

Q6814	COUNT	PRG						ROW TOTAL
		I	I	1	I	2	I	
Q68141	I	5	I	7	I	9	I	21
Q68142	I	5	I	3	I	5	I	13
COLUMN TOTAL		6		7		9		22
		27.3		31.8		40.9		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS
22 VALID CASES 6 MISSING CASES

349

5. To help teachers understand how children learn.

		PRG							
COUNT		I							
		I	1	I	2	I	3	I	
		I						ROW TOTAL	
Q6815	Q68151	I	7	I	8	I	10	I	25
		I		I		I		I	96.2
Q68152	Q68152	I	6	I	5	I	8	I	19
		I		I		I		I	73.1
COLUMN TOTAL			7		8		11		26
			26.9		30.8		42.3		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

26 VALID CASES 2 MISSING CASES

6. To help teachers understand how they can use research findings in improving their teaching.

Q6816 (TABULATING 1)
BY PRG

		PRG							
COUNT		I							
		I	1	I	2	I	3	I	
		I						ROW TOTAL	
Q6816	Q68161	I	6	I	6	I	10	I	22
		I		I		I		I	100.0
Q68162	Q68162	I	6	I	3	I	6	I	15
		I		I		I		I	68.2
COLUMN TOTAL			6		6		10		22
			27.3		27.3		45.5		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

22 VALID CASES 6 MISSING CASES

7. To make teachers aware that we live in a diverse society and that everyone deserves an equal chance.

Q6817 (TABULATING 1)
BY PRG

Q6817	COUNT	PRG			ROW TOTAL
		1	2	3	
Q68171	6	8	11	25	
Q68172	4	3	6	13	
COLUMN TOTAL	6	8	11	25	
	24.0	32.0	44.0	100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

25 VALID CASES

3 MISSING CASES

8. To help teachers organize their classroom to stimulate teaching.

Q6818 (TABULATING 1)
BY PRG

Q6818	COUNT	PRG			ROW TOTAL
		1	2	3	
Q68181	6	8	10	24	
Q68182	5	3	7	15	
COLUMN TOTAL	6	8	11	25	
	24.0	32.0	44.0	100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

25 VALID CASES

3 MISSING CASES

251

9. To help them finish the program successfully.

Q6819 (TABULATING 1)
BY PRG

		PRG				ROW	
COUNT		I	I	I		TOTAL	
		I	1 I	2 I	3 I		
Q6819		-----+-----+-----+-----+-----+-----					
Q68191	I	7 I	7 I	9 I	I	23	
	I	I	I	I	I	92.0	
Q68192	I	6 I	2 I	10 I	I	18	
	I	I	I	I	I	72.0	
		-----+-----+-----+-----+-----+-----					
COLUMN		7	7	11		25	
TOTAL		28.0	28.0	44.0		100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

25 VALID CASES

3 MISSING CASES

356

69. How about your methods of assessment? How do you determine if students have mastered the necessary knowledge and skills in your segment of the teacher education program?

1. Requiring an examination at end of program ()
2. Revising exam results from the classes the student has taken ()
3. Observing the student/teacher teach ()
4. Final interview before he leaves the program ()
5. Ask faculty about the overall performance of the student/teacher ()
6. Other, which? _____ ()

If possible include a copy of an exam or any other assessment device you use. Also, please provide examinations or tests that are commonly used throughout the program to assess performance.

Q69. Concerning methods of assessment, all three programs agree that requiring an examination at the end of program and observing the student/teacher teach are the most frequently used method.

Q69 (TABULATING 1)
BY PRG

Q69	COUNT	PRG			ROW TOTAL
		1	2	3	
Q691	7	7	9	23	
Q692	2	1	5	8	
Q693	7	9	11	27	
Q694	0	3	3	6	
Q695	1	3	6	10	
Q696	0	2	0	2	
COLUMN TOTAL	7	10	11	28	
	25.0	35.7	39.3	100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

28 VALID CASES

0 MISSING CASES

50

71. What changes of any kind would allow you to do a better job in what you are trying to do?
1. A new policy that recognizes the importance of Teacher Education programs like this one ()
 2. Extended class time for the program ()
 3. Better and careful plans for development ()
 4. Stability in the organization ()
 5. More courses on methods ()
 6. Practicum ()
 7. Courses in subject matter ()
 8. Courses in pedagogy ()
 9. Better selected students ()
 10. More motivated students ()
 11. More motivated faculty ()
 12. Better trained faculty ()
 13. Better salaries for the staff
 14. Other, which? _____ ()

Q71. Concerning kinds of changes needed to do a better job, teacher colleges think that a new policy that recognizes the importance of teacher Education programs like one, better and careful plans for development, and better selected students are most important. College of Education considers better selected students as most important. Distance Education considers a new policy that recognizes the importance of teacher Education program like one is most important. In general, the three programs agree that a new policy and better selected students are important changes needed to do a better job.

Q71 (TABULATING 1)
BY PRG

PAGE 1 OF 2

Q71	COUNT	PRG						ROW TOTAL		
		I	I	1	I	2	I		3	I
Q711		I		6	I	3	I	10	I	19
		I			I		I		I	67.9
Q712		I		3	I	5	I	5	I	13
		I			I		I		I	46.4
Q713		I		6	I	3	I	5	I	14
		I			I		I		I	50.0
Q714		I		3	I	5	I	7	I	15
		I			I		I		I	53.6
Q715		I		5	I	4	I	7	I	16
		I			I		I		I	57.1
Q716		I		5	I	7	I	8	I	20
		I			I		I		I	71.4
Q717		I		5	I	2	I	6	I	13
		I			I		I		I	46.4
Q718		I		4	I	0	I	6	I	10
		I			I		I		I	35.7
Q719		I		6	I	8	I	5	I	19
		I			I		I		I	67.9
Q7110		I		5	I	6	I	4	I	15
		I			I		I		I	53.6
Q7111		I		5	I	5	I	6	I	16
		I			I		I		I	57.1
	COLUMN TOTAL			7		10		11		28
				25.0		35.7		39.3		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS
(CONTINUED)

72. What would make you more able to meet your personal goals for students?

- 1. More resources (materials, fiscal, human) ()
- 2. Political support outside the program ()
- 3. Political support within the program ()
- 4. More time to prepare courses ()
- 5. Other, which? _____ ()

Q72. All three programs agree that more resources and political support and within the program are the most important factors in meeting their personal goals for students.

Q72 (TABULATING 1)
BY PRG

Q72	COUNT	PRG			ROW TOTAL
		1	2	3	
Q721	7	8	10	25	
Q722	2	5	2	9	
Q723	5	2	8	15	
Q724	1	3	0	4	
COLUMN TOTAL	7	10	11	28	
	25.0	35.7	39.3	100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

28 VALID CASES

0 MISSING CASES

VI. Views of Teaching and Learning to Teach.

73. What kind of teacher are you trying to develop? (Characteristics, skills, and abilities).

1. Teachers who are able to perform the various tasks of teaching ()
2. Teachers who understand both the theory and practice of teaching. ()
3. Teachers who have a strong sense of professionalism ()
4. Teachers who are able to evaluate their own teaching ()
5. Teachers who know well their subject matter ()
6. Teachers who are responsive to the needs of their students ()
7. Teachers who are responsive to the requirements of the school curriculum. ()
8. Teachers who are responsive to the needs of the community ()
9. Teachers who have critical thought. ()
10. Teachers who prepare their students to pass the exam ()
11. Teachers who think that learning is what is important not pass an exam ()
12. Other, which? _____ ()

Q73. Concerning the kinds of teacher they are trying to develop, teacher colleges think that teachers who understand both the theory and practice of teaching as most important. College of Education considers teachers who understand both the theory and practice of teaching, teachers who have a strong sense of professionalism, and teachers who are responsive to the needs of their students as most important. Distance Education considered teachers who are able to perform the various tasks of teaching and teachers who are able to evaluate their own teaching as most important. In general, the three programs agree that teachers who understand both the theory and practice of teaching and teachers who are responsive to the needs of their students as most important.

Q73 (TABULATING 1)
BY PRG

PAGE 1 OF 2

Q73	COUNT	PRG			ROW TOTAL
		1	2	3	
Q731	6	6	11	23	
Q732	7	8	10	25	
Q733	6	8	9	23	
Q734	6	5	11	22	
Q735	6	6	9	21	
Q736	6	8	10	24	
Q737	6	5	8	19	
Q738	6	7	7	20	
Q739	5	7	8	20	
Q7310	1	1	2	4	
Q7311	3	3	5	11	
COLUMN TOTAL	7	10	11	28	
	25.0	35.7	39.3	100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS
(CONTINUED)

74. How do people get to be that kind of teacher?

1. People have an ability to teach that is natural on them ()
2. Teaching is like any other profession people have to dedicate long hours of study and practice to be good at teaching. ()
3. By trial and error, on the job experience is what makes people good teachers ()
4. By mastering their subject matter, the rest is not difficult ()
5. By knowing pedagogical skills ()
6. By learning to be sensitive to the needs of their students ()
7. By watching others teach ()
8. Other, which? _____ ()

Q74. Concerning how people get to that kind of teacher, teacher colleges thinks that long hours of study and practice is most important. College of education think that long hours of study and practice, and learning to be sensitive to the needs of their students as most important. Distance education thinks that long hours of study and practice, and by knowing pedagogical skills as most important. In general, long hours of study and practice and by learning to be sensitive to the needs of their students are the most important factors agreed by all three programs.

Q74 (TABULATING 1)
BY PRG

Q74	COUNT	PRG			ROW TOTAL
		1	2	3	
Q741	I I I	4 I I	1 I I	0 I I	5 18.5
Q742	I I	7 I	9 I	10 I	26 26.3
Q743	I I	2 I	1 I	4 I	7 25.9
Q744	I I	4 I	5 I	4 I	13 48.1
Q745	I I	5 I	5 I	9 I	19 70.4
Q746	I I	5 I	9 I	8 I	22 81.5
Q747	I I	5 I	5 I	6 I	16 59.3
COLUMN TOTAL		7 25.9	10 37.0	10 37.0	27 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

27 VALID CASES

1 MISSING CASES

261

75. How successful is your program in producing such teachers?

- Very ()
- Somewhat ()
- Not successful ()

Q75. 5 faculty members considered the program very successful and 22 of them considered the program as somewhat successful.

COUNT	I	I	I	I	ROW TOTAL
	I	1I	2I	3I	
1	I	I	2 I	3 I	5
	I	I	I	I	18.5
2	I	7 I	8 I	7 I	22
	I	I	I	I	81.5
COLUMN TOTAL	7	10	10	27	
TOTAL	25.9	37.0	37.0	100.0	

76. How do you explain that?

1. The careful plan or program of studies ()
2. The dedication of the faculty ()
3. The preparation and quality of the faculty and program staff in general ()
4. The previous experience that the students/teachers bring with them ()
5. The student/teachers are mature people who think of themselves as serious professionals ()
6. The salary is higher after their finish the program ()
7. The successful completion of this program offers teachers an opportunity for promotion ()
8. The successful completion of this program allows teachers to move from a "difficult" school to a better situated school ()
9. Having a certificate/diploma from this program adds prestige to the particular teacher ()
10. A new policy by the government encouraging teachers to upgrade their knowledge ()
11. Other, which? _____ ()

Q76. Concerning the reasons for the success of the program, teacher college and distance education think that the preparation and quality of the faculty and program staff in general is most important. College of education thinks that the dedication of the faculty is the most important. In general, all three programs agreed the two reasons mentioned above as the most important reasons for the success of the program.

Q76 (TABULATING 1)
BY PRG

Q76	COUNT	PRG			ROW TOTAL
		1	2	3	
Q761	3	5	8	16	
				59.3	
Q762	5	8	7	20	
				74.1	
Q763	6	7	9	22	
				81.5	
Q764	4	3	4	11	
				40.7	
Q765	3	0	3	6	
				22.2	
Q766	5	2	6	13	
				48.1	
Q767	3	2	5	10	
				37.0	
Q768	0	0	2	2	
				7.4	
Q769	4	5	5	14	
				51.9	
Q7610	0	0	2	2	
				7.4	
COLUMN TOTAL	7	10	10	27	
	25.9	37.0	37.0	100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

27 VALID CASES

1 MISSING CASES

26

77. What is the main reason students/teachers enroll in your program?

1. The authentic desire to learn and be prepared as teachers()
2. To get a new certificate or diploma ()
3. To be able to negotiate their transfer to another school ()
4. A policy mandated by the government stating that teachers need more training ()
5. This program gives them prestige. ()
6. Fellowships of other monetary help makes easier for them to enroll. ()
7. The poor learning experience that children are receiving in school nowadays and the government's concern to improve the situation ()
8. The new tendency in the government to move from a western style of teaching; to a style more appropriate to Sri Lanka. ()
9. Unprepared teachers are being pushed aside by certified teachers not only by their experience or seniority. ()
10. Other, which? _____ ()

Q77. Concerning the main reason students/teachers enroll in the program, teacher colleges and distance education thinks that to get a new certificate or diploma is the most important. College of Education consider fellowships of other monetary help makes easier for them to enroll. In general, the most important reasons are to get a new certificate and unprepared teachers are being pushed aside by certified teachers not only by their experience or seniority.

Q77 (TABULATING 1)
BY PRG

Q77	COUNT	PRG						ROW TOTAL
		I	1	I	2	I	3	
Q771	I	2	I	1	I	4	I	7
	I		I		I		I	25.9
Q772	I	6	I	3	I	9	I	18
	I		I		I		I	66.7
Q774	I	4	I	0	I	4	I	8
	I		I		I		I	29.6
Q775	I	4	I	1	I	4	I	9
	I		I		I		I	33.3
Q776	I	1	I	4	I	0	I	5
	I		I		I		I	18.5
Q777	I	3	I	3	I	4	I	10
	I		I		I		I	37.0
Q778	I	0	I	1	I	2	I	3
	I		I		I		I	11.1
Q779	I	5	I	0	I	7	I	12
	I		I		I		I	44.4
Q7710	I	2	I	5	I	0	I	7
	I		I		I		I	25.9
COLUMN TOTAL		7		10		10		27
		25.9		37.0		37.0		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

27 VALID CASES

1 MISSING CASES

78. Of all the things that prospective teachers need to know or be able to do, which single thing is the most important? (Mark with an "X" all that apply.)

1. Have good classroom management skills ()
2. Master the subject matter that is taught in elementary school ()
3. Understand and respect the hierarchical structure of schools ()
4. Be informed of the new knowledge produced by research about teaching and learning ()
5. Have a good personality ()
6. Be willing to learn from others and from his own mistakes ()
7. Understand children needs and abilities ()
8. Try different pedagogic strategies to make the students understand and learn ()
9. Get to know each one of the students to establish a relationship of trust with them. ()
10. Participate in curriculum development in the school ()
11. Participate in community activities ()
12. Know and teach children the culture and work that make their community special ()
13. Adopt the curriculum to the specific needs of the community where the school is located or where the students come from ()
14. Other, which? _____ ()

Q78. Concerning the most important thing that prospective teachers need to know, teacher college think that have good classroom management skills, master subject matter that is taught in elementary school, be informed of the new knowledge produced by research about teaching and learning, and try different pedagogic strategies to make the students understand and learn. College of Education considers try different pedagogic strategies as most important. Distance education considered understand children needs and abilities as most important. In general, the three programs agree that trying different pedagogic strategies and having good classroom management skills as most important.

Q78 (TABULATING 1)
BY PRG

PAGE 1 OF 2

Q78	COUNT	PRG						ROW TOTAL
		1	2	3	4	5	6	
Q781		6	9	9			24	
							88.9	
Q782		6	8	9			23	
							85.2	
Q783		5	3	3			11	
							40.7	
Q784		6	5	8			19	
							70.4	
Q785		5	9	8			22	
							81.5	
Q786		4	8	9			21	
							77.8	
Q787		5	8	10			23	
							85.2	
Q788		6	10	9			25	
							92.6	
Q789		5	9	10			24	
							88.9	
Q7810		4	6	8			18	
							66.7	
Q7811		4	9	6			19	
							70.4	
	COLUMN TOTAL	7	10	10			27	
		25.9	37.0	37.0			100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

DIRECTOR QUESTIONNAIRE

The Director Questionnaire was designed with the purpose of gaining a better understanding of the purposes and structure of the teacher education programs from the point of view of the directors.

The Questionnaire is divided into six sections: 1) general information about the program, 2) program goals, 3) program structure, 4) information about the students, 5) individual role of faculty member, and 6) views of teaching and learning to teach. There are 104 questions in the questionnaire. Five Directors from Teacher Colleges, College of Education, and Distance Education are interviewed. The primary analyses of the Director Questionnaire is based on the frequencies of each question answered by the directors.

The five different sites are coded as:

1. CE - College of Education (Hapitigama and Mahaweli)
2. TC - Teacher College (Gampola and Bolawalana)
3. DE - Distance Education

1. General information about the program

2. Why was the program created?

1. There was a felt need for professionally trained teachers ()
2. This program is the result of international agencies support for higher education ()
3. This is a government mandated program to provide teachers with the credentials they need to be promoted ()
4. This program is the result of an educational reform to raise the level of education of teachers ()
5. This program is the result of an educational reform to raise the level of achievement of elementary school children ()
6. This program is part of a larger project that proposes to reduce elementary school children drop out, or repetition ()
7. Other, which? _____ ()

Q2. Why was the program created?

In general, all directors agreed that there was a felt need for professionally trained teachers(1). This program is the result of an educational reform to raise the level of education of teachers is also an important reason(4). Other reasons for the creation of the program are: international agencies support for higher education(2), a government mandate to provide teachers with credentials (3), educational region directed to raise level of achievement of school children (5), as part of a larger project to reduce elementary school children drop-out, and other resources (7).

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	2	1	5
2	0	1	1	
3	1	1	0	2
4	1	2	0	3
5	0	2	0	2
6	1	1	0	2
7	0	1	0	1

3. Who (institution) created it?

1. The government through the MOE created it ()
2. The government through NIE created it ()
3. An international agency had a very important role in the creation of the program ()
4. A private group had a major role in the creation of this program ()
5. Other, which? _____ ()

Q3. Who created it?

Four out of five directors agreed that the program was created by the government through the MOE(1). Teacher College Bolawalana is created by an international agency(3) and a private group(4). Other option was the government through the National Institute of Education created it (2).

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	1	1	4
3	0	0	1	1
4	0	1	0	1
5	0	1	0	1

4. Who was the program supposed to serve?

1. Teachers who had been teaching for a long time and needed to upgrade their knowledge ()
2. Teachers who needed to obtain a certificate or other credential to ask for a transfer or a promotion ()
3. Individuals who wanted to follow teaching as a profession ()
4. Individuals who were not happy with going into

- teaching without a credential ()
- 5. Children who directly benefit from having more qualified teachers ()
- 6. Other, which? _____ ()

Q4. Who was the program supposed to serve?

In general, the directors think that individuals who wanted to follow teaching as a profession(3), and children who directly benefit from having more qualified teachers are the most important reasons(5). Other options were teachers who need to upgrade their knowledge (1), teachers who need a credential (2), individuals who wanted a teaching credentials (4), and toehr (6).

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	0	0	1	1
3	1	2	0	3
4	1	0	0	1
5	2	1	0	3
6	0	1	0	1

5. Who makes the decisions about this program's goals?

- 1. The officers in the MOE ()
- 2. The officers in the NIE ()
- 3. The director of the program ()
- 4. A board of directors ()
- 5. The director of the program along with department chairs ()
- 6. The director of the program along with faculty ()
- 7. Other, which? ()

Q5. In making decisions about the program's goals, the officers in the MOE (1) and the director of the program along with faculty (6) seems to be the most important factors.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	1	2	0	3
2	1	0	0	1
4	1	0	0	1
5	1	1	0	2
6	0	0	1	1

5/11

6. Who makes the decisions about this program's curriculum?

1. The officers in the MOE ()
2. The officers in the NIE ()
3. The director of the program ()
4. A board of directors ()
5. The director of the program along with department chairs ()
6. The director of the program along with faculty ()
7. Other, which? ()

Q6. In making decisions about the program's curriculum, the officers in the MOE(1), the director of the program along with department chairs(5), and the director of the program along with faculty(6) are the most important factors.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	1	1	0	2
2	1	0	0	1
4	1	0	0	1
5	0	2	0	2
6	1	0	1	2

7. Who makes the decisions about this program's hiring policies?

1. The officers in the MOE ()
2. The officers in the NIE ()
3. The director of the program ()
4. A board of directors ()
5. The director of the program along with department chairs ()
6. The director of the program along with faculty ()
7. Other, which? ()

Q7. In making decisions about the program's hiring policies, the officers in the MOE(1), the officers in the NIE (2) and the director of the program along with faculty are the most important factors(5).

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	1	2	0	3
2	2	0	0	2
3	0	1	0	1

6 1 0 1 2

8. Who makes the decisions about student's admission policies?

1. The officers in the MOE ()
2. The officers in the NIE ()
3. The director of the program ()
4. A board of directors ()
5. The director of the program along with department chairs ()
6. The director of the program along with faculty ()
7. Other, which? ()

Q8. In making decisions about student's admission policies, the officers in the MOE(1), the officers in the NIE(2), and the director of the program along with department chairs (5) are the most important factors.

Programs/ Options	Program directors			TOTAL
	CE	TC	DE	
1	1	1	0	2
2	2	0	0	2
3	0	1	0	1
5	0	2	0	2
6	0	0	1	1

Q9. Who makes the decisions about program plans and administration?

1. The officers in the MOE ()
2. The officers in the NIE ()
3. The director of the program ()
4. A board of directors ()
5. The director of the program along with faculty ()
6. Other, which? ()

Q9. In making decisions about program's plans and administration, the officers in the MOE (1), the officers in the NIE(2), and the director of the program(3), and the director of the program with faculty, are the most important factors.

Programs/ Options	Program directors			TOTAL
	CE	TC	DE	
1	1	1	0	2
2	2	0	0	2

3	1	2	0	3
5	1	2	0	3

10. Who makes the decisions about program finances and budget allocation?

1. The officers in the MOE ()
2. The officers in the NIE ()
3. The director of the program ()
4. A board of directors ()
5. The director of the program along with faculty ()
6. Other, which? ()

Q10. In making decisions about program's finances and budget allocation, the officers in the MOE(1) is the most important factor.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	2	0	4
3	0	1	0	1
5	0	0	1	3

11. Does the program have different areas or departments?

- Yes ()
No ()

If you answered YES, please describe them in the space below:

12. Who holds primary responsibilities in different areas of the program?

1. The director of the program ()
2. The underdirector of the program ()
3. The department chair ()
4. Area coordinators ()
5. Faculty ()
6. Other, which? _____ ()

13. Does the program have a plan?

- Yes ()
No ()

If you answered YES, is this:

1. An annual plan? ()
2. A monthly plan? ()
3. A weekly plan ()
4. Other, which? _____ ()

Q13. To the question does the program have a plan? The answer was all programs agree that they have an annual plan for their programs.

14. Does the program have committees for: (Mark with an "X" all that apply)

1. Curriculum ()
2. Student selection ()
3. Examinations ()
4. Awarding a diploma or certificate? ()
5. Setting program goals ()
6. Other, which? _____ ()

Q14. All three programs have committees for curriculum and examinations. Most programs have committees on student selection and for awarding a diploma or certificate.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	2	1	5
2	1	2	1	4
3	2	2	1	5
4	2	0	1	3
5	2	1	0	3

15. How do you or the program decide what is relevant to teach teachers?
Please mark with an "X" all that apply.

This decision is based on:

1. The content of the examinations that these teachers have to pass ()
2. The stated needs of the country ()
3. Guidelines provided by the MOE ()
4. Guidelines provided by the government ()
5. Current research in teacher education ()
6. Input from the local community ()

- 7. Input from the international community ()
- 8. Input from students ()
- 9. Input from others ()
- 10. The people in the program decide what to teach (director, faculty, chair of department, etc.) ()
- 11. The Board of directors ()
- 12. Other, which? ()

Q15 In making decision on what is relevant to teach teachers, all colleges consider the content of the examinations that teachers have to pass as important(1). Current research in teacher education is the second most important factor(5). Guidelines provided by the MOE(3), the state needs of the country(2), guidelines provided by the government(4), and the decisions of the people(department chair, faculty) in the program are also considered as most important(10).

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	2	1	5
2	2	1	0	3
3	1	2	0	3
4	1	2	0	3
5	2	1	1	4
6	1	0	0	1
7	1	0	0	1
8	1	0	0	1
10	0	2	1	3
11	1	0	0	1

16. What is the program view about the following teaching strategies:
Please indicate with an "X" whether you think it is favorable, neutral or unfavorable.

1. Grouping

Favorable () Neutral () Unfavorable ()

2. Use of textbooks

Favorable () Neutral () Unfavorable ()

3. Homework assignments

2/17

Favorable () Neutral () Unfavorable ()

4. Setting instructional goals

Favorable () Neutral () Unfavorable ()

6. Designing student evaluations

Favorable () Neutral () Unfavorable ()

7. Design and use of instructional materials

Favorable () Neutral () Unfavorable ()

8. Estimulating cooperative learning among students

Favorable () Neutral () Unfavorable ()

9. Classroom management techniques

Favorable () Neutral () Unfavorable ()

10. Emphasis in student discipline

Favorable () Neutral () Unfavorable ()

11. Knowledge and involvement in community development activities

Favorable () Neutral () Unfavorable ()

12. Preparation of weekly teaching plans

Favorable () Neutral () Unfavorable ()

13. Awareness of the role that teacher expectations have on student achievement

Favorable () Neutral () Unfavorable ()

14. Development of teaching strategies that help to deal with racial tension

Favorable () Neutral () Unfavorable ()

15. Punctuality.

Favorable () Neutral () Unfavorable ()

Q16. Concerning the department's view about teaching strategies, all programs consider homework assignments(3), designing student evaluations(6), knowledge an involvement in community development activities (11),

preparation of weekly teaching plans(12), and punctuality(15) as favorable. In general, the programs hold a favorable attitude towards other teaching strategies: Grouping (1), use of textbooks (2), setting instructional goals (4), design and use of instructional materials (7), cooperative learning (8), emphasis in student discipline (10), and teacher expectations on student achievement (13). Most programs have a neutral attitude towards the development of teaching strategies that help to deal with racial tension(14).

1. Grouping

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	1	1	5
3	0	1	0	1

2. Use of textbooks

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	1	2	1	4
99	1	0	0	1

3. Homework assignments

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	2	1	5

4. Setting instructional goals

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	1	2	1	4
2	1	0	0	1

6. Designing student evaluation

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	1	2	1	4
2	1	0	0	1

7. Design and use of instructional materials

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	1	2	1	4
2	1	0	0	1

8. Estimating cooperative learning among students

Programs/ Options	CE	TC	Program directors		TOTAL
			DE	TOTAL	
1	1	2	1	4	
2	1	0	0	1	

9. Classroom management techniques

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	2	1	5

10. Emphasis in student discipline

2,50

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	2	1	5

11. Knowledge and involvement in community development activities

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	1	2	1	4
2	1	0	0	1

12. Preparation of weekly teaching plans

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	0	2	0	2
2	2	0	1	3

13. Awareness of the role that teacher expectations have on student achievement

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	2	1	5

17. Are the teachers you train expected to participate in:

1. Shramadana activities

Yes ()

No ()

2/1

2. Organizing and assisting religious, cultural activities,

Yes ()

No ()

3. Negotiate for material, financial, school facilities

Yes ()

No ()

4. Educate parents, adults, early school leavers in the community.

Yes ()

No ()

Q17. The teachers trained by the faculty are expected to participate in Shramadana activities(1), organizing and assisting religious(2), cultural activities(3), negotiate for material, financial, school facilities, and educate parents, adults, early school leavers in the community(4). In general, all directors agree that the two most important activities are Shramadana activities and organizing and assisting religious, cultural activities.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	2	1	5
2	2	2	1	5
3	1	1	1	3
4	1	2	1	4

18. Has the recent school reform affected the goals or the direction of your program?

Yes ()

No ()

If YES, how?

19. How long have you been the director of this program? _____ years.

20. Have you been director of other teacher education programs before your current position?

Yes ()

No ()

21. How many years have you been involved in school administrative work other than being the director of a teacher education program? _____ years.

22. How many years have you been involved in educational administration other than being a program director? _____ years.

23. Give the names of the other position you have been given:

24. What is the higher educational level you have achieved?

1. EdD, PhD, or other doctorate. ()
2. MA, MS, or other master degree ()
3. BA or other undergraduate level ()
4. No formal degree ()
5. Diploma ()
6. Certificate ()
7. Other, _____ ()

25. Where were you trained? Please provide the name of the institution and the year you graduated from it:

Name: _____
Year of graduation: _____

Now, I would like to ask you some questions about the goals of the program.

2. Program Goals

26. How would you characterize your program?

It is a program that provides:

1. Pre-service training ()
2. In-service training ()
3. In-service/distance training ()
4. In-service including practice training (NIE) ()
5. Other, which? _____ ()

Q26. Teacher Colleges characterize themselves as in-service training, College of Education as pre-service training, and Distance Education as In-service/distance training.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	0	0	2
2	0	2	0	2
3	0	0	1	1

27. What is the level at which your program operates?

1. State level ()
2. Federal level ()
3. District level ()
4. Local level ()
5. Other, which? _____ ()

Q27. All the three programs operates at State level.

28. From where does the funds that support your program come from?

1. The Ministry of Education ()
2. The NIE ()
3. Directly from the government ()
4. From the community ()
5. Foreign aid ()
6. Other, which? _____ ()

Q28. Most of the fund come from the Ministry of Education for both Colleges of education and Teacher Colleges(1). For distance education, the funds are from the NIE (2)and foreign aid(5).

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	2	0	4
2	0	0	1	1
5	0	0	1	1

29. Do you or someone from your staff gives a periodic report of your program's accomplishments to a specific person or institution after a specific period of time?

29.1 Yes ()

No (), go to question 30.

If you answered Yes, please indicate what institution you have to be accountable to:

- 29.2 The institution (s) you receive
the funding from (see question 30). ()
- 29.3 Other, which? _____ ()

Is your program the result of a specific policy put forward by the government or the MOE?

- Yes ()
No ()

If yes, describe policy:

30. How many students apply to your program last year? ____
How many were admitted? ____
31. How many students applied to your program this year? ____
How many were admitted? ____
32. How many students graduated from your program last year? ____
How many students graduated this year? ____

Please provide a list of the students who just enrolled and students who have graduated to the researcher.

Does your program keep records of the students who apply and are not admitted? (The name, the address, the school and the grade where these individuals can be identified and located?)

- Yes ()
No ()

If yes please show these records to the researcher.

33. Before going into your program what exam or requirements do the candidates have to fulfill?

Please describe in the lines below:

34. What is the typical population served by your program? (Please provide percentages)

34.1 In relation to socioeconomic status:

- % Low
 % Middle
 % High

34.2 In relation to the areas that they come from:

- % Rural areas
 % Urban areas
 % Sub-urban areas

34.3 In relation to the schools that they have been teaching in:

- % Type I AB
 % Type I C
 % Type II
 % Type III
 % Private
 % Government
 % Other, which? _____

34.4 In relation to the years of teaching experience they have had before entering your program:

- % 0 to 1 yr
 % 1 to 2 yrs
 % 3 to 5 yrs
 % 5 to 10 yrs
 % 10-20 yrs
 % 20 or more yrs

35. Is there an overall theme or purpose to the program?
 Answer with an "X" more than one alternative if applicable.

The purpose is to train elementary school teachers in:

1. General skills and knowledge needed to teach primary school. ()
2. Pedagogical skills needed to teach. ()
3. Specific knowledge of subject matter needed to teach subjects such as math, language, writing, etc. ()
4. Classroom management strategies needed in the classroom. ()
5. Help them perfect the skills they have already acquired through their teaching. ()
6. The purpose of the program is to provide teachers with certification so that they could move up in the educational structure. ()
7. Conceptual, pedagogical, and practical teaching

skills that are relevant to the rural or urban communities where they teach. ()

8. Other, explain _____ ()

Q35. Concerning an overall theme to the program, all three programs consider general skills and knowledge needed to teach primary school as important(1). Pedagogical skills needed to teach and classroom management strategies(4) needed in the classroom are also important purposes. Other program themes are specific knowledge of subject matter (3), help teachers perfect their skills (5), provide certification (6), conceptual pedagogical, and teaching skills relevant to rural or urban communities where they teach (7), and other (8).

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	2	1	5
2	2	1	1	4
3	1	1	1	3
4	1	2	1	4
5	0	1	1	2
6	1	1	0	2
7	1	1	0	2
8	0	1	0	1

36. More specifically, what goals is the program trying to accomplish?

1. Fulfill country needs for qualified teachers. ()
2. Respond to the urgent demand for teachers existent in the country. ()
3. Update teachers knowledge of teaching. ()
4. Update teacher's knowledge of subject matter. ()
5. Update teacher's knowledge of pedagogical techniques and teaching methods. ()
6. Improve or modify teacher's teaching styles. ()
7. Provide teachers with the required knowledge and abilities needed to teach. ()
8. Provide teachers with context relevant teaching techniques that will allow them to successfully ()
9. Certify a large number of teachers ()
teach children Sri Lankan ways. ()
10. Other, _____ ()

Please provide an "official" list of the goals that the program is trying to accomplish. If there is more material available that could help us clarify the program goals and objectives, as well as the program curriculum (courses, practices, and other activities), please provide a copy of this

material to the researcher or the person who gave you this survey.

Q36. All three programs agree that fulfill country needs for qualified teachers is the important goal(1). Four of the five directors think that updating teacher's knowledge of teaching is also another important goal(3). Other important goals specially for Teacher College and Distance Education are update knowledge of pedagogical skills (5), improve teaching skills (6), provide teachers with required knowledge and ability to teach (7). For College of Education, important goals are provide teachers with context relevant knowledge (8), certify a large number of teachers (9).

Programs/ Options	Program directors			TOTAL
	CE	TC	DE	
1	2	2	1	5
2	0	1	0	1
3	1	2	1	4
4	0	1	1	2
5	0	2	1	3
6	0	2	1	3
7	0	2	1	3
8	1	1	0	2
9	1	1	0	2

37. How is the program trying to accomplish these goals?
Please mark with an "x" all that apply.

1. By facilitating the entrance to the program to all those teachers who desire further training. ()
2. By restricting the entrance to the program to those teachers who have shown excellence in their teaching and in their previous studies. ()
3. By carefully designing the curriculum and courses that contribute to a better understanding of teaching and the teaching profession. ()
4. By providing the students/teachers the opportunity to apply what they are learning through supervised practice or through a similar strategy. ()
5. By recruiting the most qualified faculty to teach in the program. ()
6. By providing the teachers with courses and opportunities to understand their role in the broader context of society. ()

7. By encouraging teachers to develop those personal skills that make for successful teaching. ()
8. By providing teachers with a solid academic preparation in subject matter. ()
9. Other, which? _____ ()

Q37. Concerning how did the program try to accomplish these goals, all directors agree that by carefully designing the curriculum and courses that contribute to a better understanding of teaching and the teaching profession(3), and by providing the students/teachers the opportunity to apply what they are learning through supervised practice or through a similar strategy(4), are the important actions. Moreover, 4 directors also agree that by encouraging teachers to develop those personal skills(7) that make for successful teaching is also important. Other strategies followed by the programs are : maintaining open admssions (1), by raising entrance standards (2), by recruiting most qualified faculty (5), by providing courses and opportunities to understand their roles in society (6), and by providing teachers with a solid academic preparation in subject matter (8).

Programs/ Options	Program directors			TOTAL
	CE	TC	DE	
1	0	2	0	2
3	2	2	1	5
4	2	2	1	5
5	2	0	0	2
6	1	2	0	3
7	1	2	1	4
8	0	1	0	1

38. Of the goals that you have mentioned (and of the ones included in the list), are there any that you feel the program is particularly successful in achieving? Mark with an "x" all that apply.

1. Fullfil country needs for qualified teachers.

Very successful ()
 Moderately successful ()
 Unsuccessful ()

2. Respond to the urgent demand for teachers existent in the country.

Very successful ()
 Moderately successful ()

Unsuccessful ()

3. Update teachers knowledge of teaching.

Very successful ()

Moderately successful ()

Unsuccessful ()

4. Update teacher's knowledge of subject matter.

Very successful ()

Moderately successful ()

Unsuccessful ()

5. Update teacher's knowledge of pedagogical techniques and teaching methods.

Very successful ()

Moderately successful ()

Unsuccessful ()

6. Improve or modify teacher's teaching styles.

Very successful ()

Moderately successful ()

Unsuccessful ()

7. Provide teachers with the required knowledge and abilities needed to teach.

Very successful ()

Moderately successful ()

Unsuccessful ()

8. Other, _____

Very successful ()

Moderately successful ()

Unsuccessful ()

Q38. Concerning success with achieving the program goals, the three goals that are considered as most successful are respond to the urgent demand for teachers existent in the country(2), update teacher's knowledge of pedagogical techniques and teaching methods(5), and provide teachers with the required knowledge and abilities needed to teach(7).

1. Fulfil country needs for qualified teachers

Program directors

Programs/ Options	CE	TC	DE	TOTAL
1	1	1	1	3
2	1	1	0	2

2. Respond to the urgent demand for teachers existent in the country.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	2	0	4
99	1	1	0	2

3. Update teachers knowledge of teaching.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	1	1	1	3
2	1	2	0	3

4. Update teacher's knowledge of subject matter.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	1	1	1	3
2	1	1	0	2

5. Update teacher's knowledge of pedagogical techniques and teaching methods.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	1	1	4
2	0	1	0	1

6. Improve or modify teacher's teaching styles.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	1	1	1	3
2	1	1	0	2

7. Provide teachers with the required knowledge and abilities needed to teach.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	1	1	4
2	0	1	0	1

8. Other:

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	1	0	0	1
2	1	1	0	2
99	0	1	1	2

39. How do you explain the degree of program success? Mark with an "X" all that apply.

1. The program has well defined goals ()
2. The program has a careful designed plan to follow for training teachers. ()
3. The program receives the adequate financial support ()
4. The program has the adequate resources ()

5. The program has political support ()
6. The program has been recognized as providing high quality teacher training. ()
7. The program keeps up with the latest research in the field about effective teachers. ()
8. The curriculum is flexible and allows for changes according to the recent research and the needs of students and teachers in Sri Lanka. ()
9. The staff in the program has achieved a strong sense of what the program is all about. ()
10. Other, which? _____ ()

Q39. When explaining the facts that contribute to the success of the programs, all directors agree that the staff in the program has achieved a strong sense of what the program is all about(9). 4 out of 5 directors agree that the program has well defined goal(1) and the program has a careful designed plan to follow for training teachers(2). Other reasons are the program receives adequate financial support (3), adequate resources (4), political support (5), the program is recognized as producing high quality teachers (6), the programs keeps up with research on teaching (7), the curriculum is flexible(8) and other (10).

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	1	2	1	4
2	2	1	1	4
3	2	0	1	3
4	2	0	0	2
6	2	1	0	3
7	1	0	0	1
8	2	1	0	3
9	2	2	1	5
10	1	0	0	1

40. To what extent is there agreement among the participants about the goals of the program?
 1. In general, everybody agrees ()
 2. There is often agreement with the direction of the program ()

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- 3. There is often disagreement among the junior and the senior faculty in the program ()
- 4. There is general disagreement about the goals of program. ()
- 5. The goals are unclear and diffuse and it is hard to tell whether there is agreement or not. ()
- 6. There is enough flexibility in the program for the faculty freely teach what they think is best. ()
- 7. Other, which? _____ ()

Q40. In concerning the extent there is agreement among the participants about the goals of the program, all directors think that in general, everybody agrees(1). Two directors also think that there is often agreement with the direction of the program (2)and there is enough flexibility in the program for the faculty freely teach what they think is best(6).

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	2	1	5
2	1	1	0	2
6	1	1	0	2

41. What accounts for this level of agreement?
- 1. Clear goals. ()
 - 2. Weekly meetings with the staff where the goals of the different courses are revised or discussed. ()
 - 3. Frequent communication with the students ()
 - 4. Frequent communication with the director of the program or with the coordinator of the courses. ()
 - 5. Frequent communication with the MOE ()
 - 6. Other, which? _____ ()

Q41. The directors from all three programs consider clear goals is the most important reason accounts for this level of agreement(1). The other two important reasons are frequent communication with the director of the program or with the coordinator of the courses(4), and frequent communication with the MOE(5).

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	2	1	5
2	1	0	0	1
3	1	2	0	3
4	2	2	0	4
5	2	2	0	4

42. Is there agreement among the participants (faculty/director/staff) about the following aspects:? Mark with an "X" all that apply.

1. Program purpose. ()
2. Teaching methods used in the program. ()
3. The teaching styles that the program advocates for the students/teachers. ()
4. Curriculum content. ()
5. Teaching practice for the students. ()
6. Other learning opportunities for the students ()
7. Other, which? _____ ()

Q42. Concerning the agreement among the participants, the directors seems to think that there is agreement on almost all aspects. All directors believe there is agreement on program purpose(1), curriculum content(4), and teaching methods used in the program(2). 4 directors believe there is agreement on the teaching styles that the program advocates for the students/teachers(3), teaching practice for the students(5), and other learning opportunities for the students(6).

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	2	1	5
2	2	2	1	5
3	1	2	1	4
4	2	2	1	5
5	1	2	1	4
6	1	2	1	4

43. In your opinion, what events may have motivated those in the program to aim for the current goals rather than some others? Mark with an "x" all that apply.

- 1. These goals are mandated by the State. ()
- 2. They are based on country priorities. ()
- 3. The goals of the program are geared to provide certification that these teachers need. ()
- 4. They are a consequence of the new educational reform. ()
- 5. This program is instrumental to the reform of decentralization in Sri Lanka. ()
- 6. These are the goals that have always directed the program since its creation. ()
- 7. Other, which? _____ ()

Q43. Concerning what events may have motivated those in the program to aim for the current goals rather than some others, all directors agree that these are goals that have always directed the program since its creation (6). 4 directors also agree that they are based on country priorities (2). 3 of them (2 colleges of education and one teacher college) agree these programs are a consequence of the educational reform (4).

Programs/ Options	Program directors			TOTAL
	CE	TC	DE	
1	1	.	0	2
2	2	2	0	4
3	0	1	0	1
4	2	1	0	3
6	2	2	1	5

44. What do you think would work against attainment of program goals? Mark with an "x" all that apply.

- 1. Bureaucracy, excessive paper work that distracts from focus on the curriculum and instruction. ()

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2. Ministry of education guidelines, and requirements or other institutional guidelines. ()
3. Lack of resources (money and other resources) ()
4. The quality of the students/teachers. ()
5. The quality of the materials used for instruction ()
6. The quality of the faculty. ()
7. The curriculum is old and outdated ()
8. Lack of supervised practice and other similar learning opportunities for the students. ()
9. Distance and other environmental situations ()
10. Other, which? _____ ()

Q44. In concerning the factors work against attainment of programs goals, lack of resources(3) , the quality of the students(4), and the lack of supervised practice and other similar learning opportunities for the students (8) are the most important factors.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	0	1	0	1
3	1	2	0	3
4	2	1	0	3
5	0	1	0	1
6	1	0	0	1
7	0	1	0	1
8	0	1	1	2
9	0	1	0	1

45. Are you aware of any goals that were discussed and specifically rejected when the program was developed?

1. Yes ()
2. No (), go to question 46.

If YES, mention which? _____

46. Are there additional goals for the program, overall, that are NOT being addressed--either by you or others involved in the program--that you feel SHOULD be receiving attention?

- 1. Yes ()
- 2. No (), go to question 47.

If YES, what are these? _____

47. If the program was given an extra half year to work with its teacher candidates, what would you add to the curriculum? Mark with an "X" all that apply.

- 1. Supervised classroom practice ()
- 2. Methods courses ()
- 3. Research on teaching and learning courses ()
- 4. Courses in pedagogical techniques ()
- 5. Field trips to acquaint with the needs of diverse communities in Sri Lanka ()
- 6. More training in community development strategies ()
- 7. Would provide subject matter specific courses (e.g. more courses in math, or language, etc.) ()
- 8. Would add nothing but will extend the time teachers spend learning how to teach. ()
- 9. Other, which? _____ ()

Q47. If the program was given an extra half year to work with its teacher candidates, 4 directors agree that supervised classroom practice is the most important. Other are : methods course(2), research on teaching and learning courses (3), courses on pedagogy (4) field trips to communities (5), training in community strategies (6), subject matter courses (7).

Programs/ Options	Program directors			TOTAL
	CE	TC	DE	
1	1	2	1	4
2	1	1	0	2
3	2	0	0	2
4	1	1	0	2
5	1	1	0	2
6	1	1	0	2
7	0	1	0	1

[Handwritten signature]
2/9/5

48. How would that extra time be spent?

% time

1. Old curriculum _____
2. New courses _____
3. Practice _____
4. Research _____
5. Field trips to communities _____
6. Other, which? _____

49. If the program was given extra money or other resources needed to work with its teacher candidates, what would you add to the curriculum?

1. Video equipment ()
2. Computers ()
3. Books, and other learning materials ()
4. Empirical research projects to teach teachers how to learn from their experiences and from their students ()
5. Field trip requirements for them to learn about the diverse needs of children and their communities in Sri Lanka. ()
6. Organize simposia, conferences, etc., in which Sri Lankan teachers, practitioners, academics and students will talk about teaching and learning. ()
7. Other, which? _____ ()

Q49. If the program was given extra money or other resources needed to work with its teacher candidates, all directors agree that empirical research projects to teach teachers how to learn from their experiences and from their students is important(4). 4 directors also agree that books, and other learning materials should be added(3). Other answers:

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	1	1	0	2
3	2	2	0	4
4	2	2	1	5
5	0	2	0	2
6	1	2	0	3

50. How would that extra money or resources be spent?

% resources

- 1. New equipment or materials _____
- 2. Research projects _____
- 3. Conferences _____
- 4. Field trips _____
- 5. Other, which? _____

3. Program Structure

51. What are the main components of the program? Include the number of courses and the level they are taught using the list below. Please add any of those courses that are not included in the list.

Provide an official description of the program (i.e., a catalog of courses, a plan, etc.)

Level	How many?	
	(1st. Yr., 2nd Yr in the program)	
1. Introductory teaching courses (e.g. orientation courses)	_____	_____
2. Foundations courses (psychological, social, historical, philosophical, comparative)	_____	_____
3. Methods courses (math, language)	_____	_____
4. Elementary methods	_____	_____
5. Other methods courses	_____	_____
6. Modules	_____	_____
Which? _____	_____	_____
7. Student teaching seminars/workshops	_____	_____
8. Supervising field experience	_____	_____
9. Guided practice	_____	_____
10. Observation of other teachers	_____	_____
11. Conferences with students and teachers	_____	_____
12. Research on teaching and learning courses and labs	_____	_____
13. Other, which? _____	_____	_____

52. Why are things sequenced in this way? (i.e., courses first, guided practice next, etc. or viceversa?)

Handwritten mark

How many instructors or faculty do you have in your program?

	Part-time	Full-time
_____ professors with a PhD	_____	_____
_____ professors with a MA	_____	_____
_____ professors with a BA	_____	_____
_____ professors with other degree or certificate	_____	_____
_____ instructors or professors without a degree _____		
_____ Other, which? _____		

How many courses do each professor have to teach, and at what level?

_____ number of courses per professor at level 1
 _____ number of courses per professor at level 2
 _____ number of courses per professor at level 3
 _____ number of courses per professor at level 4
 _____ number of courses per professor at other levels

53. How are outside instructors if any selected?

There are not outside instructors selected (), Go to question 54.

They are selected in terms of:

1. Their credentials ()
2. Educational degree (BA or MA or PhD) ()
3. How many years of teaching experience
they have ()
4. They are assigned to the program
by the MOE ()
5. Other, which? _____ ()

Q53. The two most important criteria in the selection of outside instructors are their credentials(1) and years of experience(3).

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	1	1	0	2
3	2	2	0	4
4	1	0	0	1

54. Is their performance evaluated?

Yes ()

No (), Go to question 55.

If so how?

- 1. Periodic workshops to update teachers knowledge ()
- 2. Supervisors from the MOE observe in the classroom ()
- 3. Frequent interviews or evaluation meetings with the program director ()
- 4. Observations by the program director ()
- 5. Evaluation from peers ()
- 6. Other, which? _____ ()

Q54. The two method most frequently used in the evaluation of the performance are frequent interviews(3) and observations by the program director(4).

Programs/ Options	Program directors			TOTAL
	CE	TC	DE	
1	1	1	0	2
3	1	2	0	3
4	2	1	0	3
5	2	2	0	4
6	1	0	0	1

55. Is there on site training?

Yes ()

No (), Go to question 56.

If so describe this component?

Use the following letters to indicate the frequency with which this training occurs: m=monthly, w=weekly, 2m=every 2 months, 6m=every 6 months, y=yearly.

How often?

- 1. Seminars or workshops organized within the program _____
- 2. Courses taken in different universities _____
- 3. Courses or seminars organized by the MOE _____
- 4. Invited speakers come to teach the faculty _____

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5. Conferences and congresses at local/national level _____
 6. Other, which? _____

56. How many faculty teach in the program in a given year?

Number:

1. How many taught last year? _____
 2. How many this year? _____
 3. How many in level 1? _____
 4. How many in level 2? _____
 5. How many in level 3? _____
 6. How many in level 4? _____
 7 Other? Which? _____

What type of courses do they teach?

Does an individual faculty member teaches more than one course?

57. What is the budget allocated to the program in a given year?

Amount:

1. How much money was allocated last year (1987)? _____
 2. How much money was allocated this year (1988)? _____
 3. Where did this money came from? _____

58. What type of certificates/diplomas do the participants in the program receive? Please list them below:

59. Are there different requirements within the program for different types of students?

Yes ()

No (), go to question 60.

Which are these differences?

1. There are differences in terms of the sub-programs
 (e.g., tracking into different program content) ()
 2. Differences according to ability level. ()
 3. Differences according to whether they will teach in
 rural or urban areas. ()
 4. Differences by levels (please describe:)
 in level 1? _____
 in level 2? _____
 in level 3? _____

in level 4? _____
 5. Other? Which? _____

60. How many credits or courses the students have to take in order to graduate?

of credits in:

- 1. How many in level 1? _____
- 2. How many in level 2? _____
- 3. How many in level 3? _____
- 4. How many in level 4? _____
- 5. Other? Which? _____
- 6. Total # of credits: _____

Is this the same for everybody?

- Yes (), why? _____
- No (), why not? _____

Are there required courses (i.e., core courses and electives, how do the students select?

4. Students

60. Are there selection criteria for students entering the program?

- 1. Yes ()
- No (), go to question 61

If yes, please describe these criteria (mark more than one):

- 2. Level of education, describe _____ ()
- 3. Passing an examination, describe _____ ()
- 4. Number of years teaching, describe _____ ()
- 5. Region of the country where they live _____ ()
- 6. Socioeconomic level of the candidate ()
- 7. Region of the country where they teach _____ ()
- 8. Personality characteristics, describe _____ ()
- 9. Grade point average in previous studies _____ ()
- 10. Teaching experience is not required ()
- 11. Ability to pay tuition _____ ()
- 13. Everyone who wants can go into the program ()
- 14. Other, which? _____

61. Does the program have any formal evaluation?

- Yes (), describe _____
- No ()

62. Is it related to any teacher competency assessment?

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Yes (), describe _____
 No ()

63. Are these criteria sufficient or would you change them in some way?

- 1. Yes, these criteria are sufficient ()
- 2. No, these criteria should be more demanding ()
- 3. No, these criteria are too demanding ()
- 4. Other, which? _____ ()

64. How would you characterize the type of student who decides to enroll in the program?

How would you characterize them in terms of:

1. Race (provide percentages):

- 1. Sinhalese _____
- 2. Tamil _____
- 3. Muslim _____
- 4. Other _____

2. Sex (provide percentages):

- 1. Male _____
- 2. Female _____

3. Overall ability (provide percentages):

- 1. High ability level _____
- 2. Medium ability level _____
- 3. Low ability level _____

4. Overall ability in comparison with similar schools (colleges):

- 1. High ability than other colleges _____
- 2. About the same level than others _____
- 3. Lower ability than other colleges _____

How many students do you have in your program? (include here number of students by level and/or speciality).

65. In a given year how many students are enrolled in the program?

	Number:	Speciality
1. How many were enrolled last year?	_____	_____
2. How many this year?	_____	_____
3. How many in level 1?	_____	_____
4. How many in level 2?	_____	_____
5. How many in level 3?	_____	_____
6. How many in level 4?	_____	_____
7 Other? Which?	_____	_____

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66. How many students:

1. Graduate each year?

1. Last year (1987) _____
 2. This year (1988) _____

2. How many drop out?

1. Last year (1987) _____
 2. This year (1988) _____

3. Does anybody fail courses?

- Yes (), Why? _____
 No () Why not? _____

4. Does anybody fail to finish the program?

- Yes (), Why? _____
 No () Why not? _____

67. What is the cost per student?

Rs. per Student

1. What was the cost last year (1987)? _____
 2. What is the cost this year (1988)? _____
 3. How much in level 1? _____
 4. How much in level 2? _____
 5. How much in level 3? _____
 6. How much in level 4? _____
 7 Other? Which? _____

Please provide records of these statistics

68. Worldliness or sophistication (general previous experience before entering the program):

Percentage of the students who:

%

1. Come from rural background _____
 2. Come from urban background _____
 3. Have not travel outside their home town
 when they come to the program _____
 4. Have not taught before _____
 5. Have had some teaching experience _____
 6. Only have had experience as teachers _____
 7. Have performed other occupations
 before considering teaching _____
 8. Other, which? _____

69. Personality characteristics:

Most of the students are:

40%

1. Independent ()
2. Take the initiative ()
3. Hard working ()
4. Well educated ()
5. Interested on others well being ()
6. Interested in justice ()
7. Professionals or behave as such ()
8. Punctual ()
9. Responsible ()
10. Lack motivation ()
11. Procastinate ()
12. Other, which? _____ ()
13. Are there other important characteristics of students entering the program that should be mentioned?

Q69. Concerning the personality characteistics of the students, the students are considered by all directors as taking the initiative (2) and punctual(8). 4 directors also thnk that the students are independent(1), and interested on others well being(5). Hard working (3) and responsible (9) are considered as important qualities.

Programs/ options	Program directors			TOTAL
	CE	TC	DE	
1	1	2	1	4
2	2	2	1	5
3	1	1	1	3
4	1	0	1	2
5	2	1	1	4
6	1	1	0	2
7	1	1	0	2
8	2	2	1	5
9	0	2	1	3
10	1	1	0	2

70. What is the general level of teaching experience of students prior to entering the program?

_____ Years in _____ (school type) at _____ (level they are employed at) with _____ (salary received), in _____ (rural or urbar area).

71. Why do students choose to enter this particular program?

1. The only option available ()
2. Reputation for quality teacher education ()

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3. Low cost ()
4. Convenient schedule ()
5. Reputation of program faculty ()
6. The type of diploma or certificate provided ()
by this program. ()
7. Other, which? _____ ()

Q71. Concerning the reasons why students choose to enter this particular program, most directors think that it is the only option available(1) , the reputation for quality teacher education (2), the type of diploma produced by program (6) as important.

Programs/ Options	Program directors				TOTAL
	CE	TC	DE		
1	1	2	0		3
2	1	2	0		3
4	0	1	0		1
5	1	0	0		1
6	1	1	0		2

72. What if anything, is done to recruit applicants?

1. A recruiter from the program goes to schools to talk to teachers. ()
2. The MOE recruits the teachers ()
3. Teachers get assigned to the different programs according to past performance, scores on a test or other similar criteria ()
4. There is not recruitment and any kind of teacher can enroll in the program ()
5. Other, which? _____ ()

Q72. In recruiting applicants, 3 directors think that the MOE recruits the teachers as the important factor (2). Colleges of Education agree MOE as important. Teacher Colleges agree that MOE and teachers get assigned to the different programs as the source. Distance Education thinks that there is no recruitment and any kind of teacher can enroll in the program. The Notice published is also an important source of recruitment for Distance education.

Programs/ Options	Program directors				TOTAL
	CE	TC	DE		
2	2	1	0		3
3	0	1	0		1

5 0 1 1 2

73. How do you decide whether an applicant should be admitted to your program?

Mark all that apply.

1. According to their performance in a national examination they have to pass after finishing high school ()
2. According to an examination that they have to present before becoming teachers ()
3. According to an examination that the program requires before they are admitted ()
4. According to their performance in previous levels of education ()
5. Personal and background characteristics ()
6. According to their performance as teachers (as recorder in evaluations by supervisors) ()
7. Other, which? _____ ()

Q73. In deciding whether an applicant should be admitted to the program, 2 directors think that according to their performance in a national examination they have to pass after finishing high school, and personal and background characteristics as important.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	0	0	2
2	0	1	0	1
3	0	0	1	1
4	1	0	0	1
5	2	0	0	2
6	0	1	0	1
7	1	1	0	2

74. What if anything is done to screen applicants (i.e., content, methods of assessing, and rigor of entrance requirements)? Mark with an "X" all that apply.

1. The applicants records are reviewed by a committee ()

- 2. The applicant has interviews with the director or counselor of the program or with faculty ()
- 3. Different examination(s) are applied to the applicant ()
- 4. Only applicants that have an above average in their academic histories are accepted ()
- 5. Other, which? _____ ()

Q74. In screening the applicants, 4 directors agree that the applicant records are reviewed by a committee. 3 directors think that the applicant has interviews with the director or counselor of the program or with the faculty.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	1	1	4
2	2	1	0	3
4	1	0	0	1

75. What does a student have to do, besides completing the program in good standing, in order to acquire and maintain teacher certification in Sri Lanka? Mark with an "x" all that apply.

- 1. It is required that they have a period of supervised teaching practice ()
- 2. They have to update their knowldege about teaching and learning every year ()
- 3. Know and comply with the school and district regulations ()
- 4. Maintain a good teaching record ()
- 5. Other, which? _____ ()

Q75. Concerning what the students have to do in order to acquire and maintain teacher certification in Sri Lanka, 4 directors think that it is required that they have a period of supervised teaching practice, and maintain a good teaching record as important.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	

Options				
1	2	2	0	4
2	0	2	0	2
3	0	2	0	2
4	1	2	1	4

76. What does the program do to help students meet those additional requirements?

1. The program arranges for the teaching practice ()
2. The program places the student in the school that he will teach at ()
3. It provides students with the regulations or materials they need to have or know to perform well on their job after graduation ()
4. Other, which? _____ ()

Q76, Concerning what the program do to help students meet those additional requirements, 4 directors agree that the program arranges for the teaching practice. 2 directors also agree that the program places the students in the school that he will teach at it.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	2	0	4
2	1	1	0	2
3	0	1	0	1

77. Which of the following factors influence a teacher's teaching record? Mark all that apply.

1. The number of students that repeat ()
2. The number of students that are promoted ()
3. The number of students that drop out ()
4. The number of students that pass the next level exam ()
5. The number of days a teacher is absent from school ()

6. Punctuality ()
7. The level of discipline of his students ()
8. Teacher's teaching style ()
9. Teacher's knowledge of subject matter ()
10. Teacher's personality ()
11. Teacher's qualifications or certificates ()
12. Other, which? _____ ()

Q77. In considering the factors that influence a teacher's teaching record, 4 directors think that punctuality and teacher's personality is important. 3 directors also think that the level of discipline of his students, teacher's teaching style, teacher's knowledge of subject matter, and teacher's qualification or certificate as important.

Programs/ Options	Program directors			TOTAL
	CE	TC	DE	
2	1	0	1	2
3	1	0	0	1
5	1	1	1	3
6	1	2	1	4
7	1	2	0	3
8	1	2	1	4
9	1	2	1	2
10	2	2	1	5
11	1	1	1	3
12	1	0	0	1

78. Would you like to see changes in the way the program assesses teaching competence (what teachers have learned)?

Yes (), which? _____

No (), go to question 79.

79. Are those changes likely to be made in the near future?

Yes (), What would facilitate these changes? _____

No (), Why not? _____

80. Is the program influenced in any obvious way by the special characteristics or "needs" of students in the program?

Yes, there are:

- 1. Shorter programs or courses for those who want to finish soon ()
- 2. Less demanding programs for those who are older ()
- 3. Less demanding programs fro those who have difficulty studying ()
- 4. More demanding programs for those participants who show special abilities ()
- 5. Special programs for those who will continue a higher level of education ()
- 6. Other, which? _____ ()

81. Is there any way to identify students who are not suited for teaching?

Yes, if yes go to question 82. ()

No, if not go to question 83. ()

Everybody is suited for teaching, there is not such thing as somebody who cannot teach. Go to question 83. ()

Q81. 4 directors agree that there are no ways to identify students who are not suited for teaching.

Programs/ Options	Program directors			TOTAL
	CE	TC	DE	
2	2	2	0	4
3	0	0	1	1

82. What happens when they are identified?

- 1. They receive counseling and are given a new chance ()
- 2. They are placed in a different program ()
- 3. They are taken out of the program and return to

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teaching in the same school as before the program ()

4. They leave the program and do not go back to teach ()

5. Other, which? _____ ()

83. Specifically, are there program wide exit criteria, such as having to pass an examination of some sort?

Yes ()

No (), go to question 84.

What kind of examination?

National examination ()

Examination provided by the school ()

Other, please describe _____ ()

Q83. All directors agree that there are program wide exit criteria which is a national examination.

84. Is there any additional criteria used?

1. According to an examination that they have to present before becoming teachers ()

2. According to their performance in the program ()

3. Personal and background characteristics ()

4. According to their performance as teachers (as recorded in evaluations by program faculty or supervisors ()

5. Other, which? _____ ()

If not, should there be?

Yes (), What kind of exit examination would you require?

No ()

Q84. Concerning other additional criteria used for exiting the program, 3 directors agree that according to their performance in the program, and their performance as teachers as recorded in evaluation by program faculty or supervisors as important. 2 directors also think that an examination that they have to present before becoming teachers as the important criteria.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	0	0	2
2	1	1	1	3
3	1	0	0	1
4	1	2	0	3

85. What are the courses, workshops, or experiences that a student in the program must take?

1. Courses:

1. Only the courses, workshops, and other learning experiences already included in the program. ()
GO to question 86.

2. Courses, workshops, and experiences other than or in addition to the ones already included in the program. ()

IF you checked number 2, please select from the list below the additions you would suggest for the program:

- | | Level | How many?
(1st. Yr., 2nd Yr in
the program) |
|--|-------|---|
| 1. Introductory teaching courses
(e.g. orientation courses) | | _____ |
| 2. Foundations courses (psychological,
social, historical) | _____ | _____ |
| 3. Methods courses (math, language) | _____ | _____ |
| 4. Elementary methods | _____ | _____ |
| 5. Other methods courses
Which? _____ | _____ | _____ |
| 6. Student teaching seminars/workshops | _____ | _____ |
| 7. Supervising field experience | _____ | _____ |
| 8. Guided practice | _____ | _____ |
| 9. Observation of teachers or mentees | _____ | _____ |
| 10. Conferences with students and teachers | _____ | _____ |
| 11. Research on teaching and learning
courses and labs | _____ | _____ |
| 12. Informal exchanges among teachers | _____ | _____ |
| 13. Orienting beginning teachers | _____ | _____ |
| 14. Other, which? _____ | _____ | _____ |

86. What are the other formal requirements a student must meet to complete the program?

1. General education requirements in a university-based program ()
2. The requirements outlined by the MOE ()
3. The formal requirements of the program ()
4. To pass a test ()
4. Other, which? ()

If you answer positively to any or to all of the questions above, please describe in detail these requirements in the following lines:

87. What significant changes in the program or its components do you anticipate over the next three years?

Why will those changes be made?

88. What other experiences or courses are recommended or desired?

1. Volunteer work in schools ()
2. Observations of fellow teachers ()
3. Observations by fellow teachers ()
4. Period of service in rural schools ()
5. Field experience to understand the needs of the rural areas. ()
6. Courses on awareness of the role of the farmer in Sri Lanka ()
7. Courses on the role of Sri Lanka in the world ()
8. Other, which? _____ ()

Q88. In considering other experiences or courses recommended for the

students, 3 directors think that volunteer work in schools(1), observations of fellow teachers(2), and observations by fellow teachers as important(3). 2 directors also think that period of service in rural schools(4) and field experience to understand the needs of the rural areas(5) as important. Other options were courses on the role Sri Lanka in the world (7).

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	1	1	1	3
2	1	1	1	3
3	1	1	1	3
4	2	0	0	2
5	0	2	0	2
6	1	0	0	1

89. Why are those experiences or courses important?

1. Provide the teacher with practice in their role ()
2. Encourage camaraderie among teachers ()
3. Confrom a group of teachers who see themselves as professionals ()
4. Sensitize teachers for their role as transmitters of knowldege to the new generations ()
5. Other, which? _____ ()

Q89. Concerning the reasons why those experiences as important, all directors think that these experiences provide the teacher with practice in their role. 3 directors also think that these experiences conform a group of teachers who see themselves as professionals.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	2	1	5
2	1	1	0	2
3	1	1	1	3
4	1	1	0	2
5	1	0	0	1

90. Should these courses be required?

Yes ()

No ()

Why? _____

Q90. 4 directors think that these courses should be required.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	1	1	4
99	0	1	0	1

5. Individual Role as a director

91. Could you describe exactly what your role is in the program? What is it that you do?

Percent of your time
%

1. Teach _____
2. Supervise the working of the program _____
3. Supervise faculty _____
4. Work directly in the curriculum of the program and other academic matters _____
5. Deal directly with the budget and resources of the program _____
6. Sets policy concerning the future of the program _____
7. Other, which? _____

If you teach, what courses do you teach?

92. What are your specific goals for students? What are the program goals for the students? Mark with an "X" all that apply.

Yours Program

1. That they learn specific subject matter knowledge () ()
2. To help them understand the social and cultural elements of teaching () ()
3. To impart the skills needed to teach all the subjects effectively () ()
4. To help teachers to learn how to learn

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- from experiences () ()
5. To help teachers understand how children learn () ()
6. To help teachers understand how they can use research findings in improving their teaching () ()
7. To make teachers aware that we live in a diverse society and that everyone deserves an equal chance () ()
8. To help teachers organize their classroom to stimulate learning () ()
9. To help them finish the program successfully () ()
10. To help them obtain a good teaching position after they finish the program () ()
11. Other, which? _____ () ()
Are they the same as the program goals, or do they differ somewhat?
1. Same ()
 2. Differ ()
 3. Complement each other ()

If they differ explain how?

Are there additional goals that you are trying to address?

Yes ()

No ()

If yes, which?

Q92.1 Concerning specific goals for students, 4 directors think that helping them understand the social and cultural elements of teaching is important. 3 directors also think that to impart the skills needed to teach all the subjects effectively, to help teachers understand how children learn, to help teachers organize their classroom to estimate learning, and to help them finish the program successfully as important.

Programs/ Options	CE	Program Directors		TOTAL
		TC	DE	
1	0	0	1	1
2	2	1	1	4
3	2	1	0	3

4	0	1	1	2
5	1	1	1	3
6	1	0	1	2
7	1	1	0	2
8	1	1	1	3
9	1	1	1	3
10	0	1	0	1

Q92.2 Concerning the program goals, all directors think that to help teachers understand how children learn and to help teachers organize their classroom to stimulate learning as important. 4 directors also think that to help teachers to learn how to learn from experience, to make teachers aware that we live in a diverse society and that everyone deserves an equal chance, and to help them finish finish the program successfully as important program goals. Other options were:

Programs/ Options	Program directors			TOTAL
	CE	TC	DE	
1	1	1	1	3
2	0	2	1	3
3	1	2	0	3
4	1	2	1	4
5	2	2	1	5
6	0	2	1	3
7	1	2	1	4
8	2	2	1	5
9	1	2	1	4
10	1	2	0	3

93. How about your methods of assessment? How do you determine if students have mastered the necessary knowledge and skills in your segment of the teacher education program?

1. Requiring an examination at end of program ()
2. Revising exam results from the classes the student has taken ()
3. Observing the student/teacher teach ()
4. Final interview before he leaves the program ()
5. Ask faculty about the overall performance of the student/teacher ()
6. Other, which? _____ ()

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If possible include a copy of an exam or any other assessment device you use. Also, please provide examinations or tests that are commonly used throughout the program to assess performance.

Q93. Concerning methods of assessment this how does the program determine if students have mastered the knowledge and skills., all directors think that requiring an examination at end of program as important. 4 directors also think that revising exam results from classes the student has taken and observing the student/teacher teach as important. Other answers are:

Programs/ Options	Program directors			TOTAL
	CE	TC	DE	
1	2	2	1	5
2	2	2	0	4
3	2	1	1	4
4	1	1	0	2
5	1	1	0	2

94. Given additional resources (people, time, money) what additional goals would you add to your personal list of goals for students?

95. What changes of any kind would allow you to do a better job in what you are trying to do?

1. A new policy that recognizes the importance of Teacher Education programs like this one ()
2. Extended class time for the program ()
3. Better and careful plans for development ()
4. Stability in the organization ()
5. More courses on methods ()
6. Practicum ()
7. Courses in subject matter ()
8. Courses in pedagogy ()
9. Better selected students ()

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10. More motivated students ()
11. More motivated faculty ()
12. Better trained faculty ()
13. Better salaries for the staff
14. Other, which? _____ ()

Q95. Concerning kinds of changes needed to do a better job, all directors think that a new policy that recognizes the importance of Teacher Education programs like the one they as important. 3 director also think that better and careful plans for development, stability in the organization, more course on methods, better selected students, more motivated students, and better trained faculty as important changes.

Programs/ Options	Program directors			TOTAL
	CE	TC	DE	
1	2	2	1	5
2	0	2	0	2
3	1	2	0	3
4	1	2	0	3
5	1	2	0	3
6	1	1	0	2
8	0	2	0	2
9	2	1	0	3
10	2	1	0	3
11	1	1	0	2
12	2	1	0	3
13	1	1	0	2

96. What would make you more able to meet your personal goals for students?

1. More resources (materials, fiscal, human) ()
2. Political support outside the program ()
3. Political support within the program ()
4. More time to prepare courses ()
5. Other, which? _____ ()

Q96. All three programs agree that more resources as important factor in meeting their personal goals. 3 directors also think that more time to prepare courses as important.

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Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	2	1	5
3	1	0	0	1
4	1	2	0	3

6. Views of Teaching and Learning to Teach

97. What kind of teacher are you trying to develop? (Characteristics, skills, and abilities).

1. Teachers who are able to perform the various tasks of teaching ()
2. Teachers who understand both the theory and practice of teaching. ()
3. Teachers who have a strong sense of professionalism ()
4. Teachers who are able to evaluate their own teaching ()
5. Teachers who know well their subject matter ()
6. Teachers who are responsive to the needs of their students ()
7. Teachers who are responsive to the requirements of the school curriculum. ()
8. Teachers who are responsive to the needs of the community ()
9. Teachers who have critical thought. ()
10. Teachers who prepare their students to pass the exam ()
11. Teachers who think that learning is what is important not pass an exam ()
12. Other, which? _____ ()

Q97. Concerning the kinds of teacher they are trying to develop, all directors think that teachers who understand both the theory and practice of teaching as important. 4 directors also think that teachers who are able to perform the various tasks of teaching, teachers who are able to evaluate their own teaching, teachers who are responsive to the requirements of the school curriculum, and teachers who are responsive to the needs of the community as

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important.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	2	0	4
2	2	2	1	5
3	1	1	1	3
4	1	2	1	4
5	1	1	1	3
6	1	1	1	3
7	2	1	1	4
8	2	1	1	4
9	1	1	1	3
10	1	0	0	1
11	1	1	0	2

98. What characteristics, skills or abilities does the ideal teacher possess?

The ideal teachers should:

1. Have good classroom management skills ()
2. Master the subject matter that is taught in elementary school ()
3. Understand and respect the hierarchical structure of schools ()
4. Be informed of the new knowledge produced by research about teaching and learning ()
5. Have a good personality ()
6. Be willing to learn from others and from his own mistakes ()
7. Understand children needs and abilities ()
8. Try different pedagogic strategies to make the students understand and learn ()
9. Get to know each one of the students to establish a relationship of trust with them. ()
- 10 Participate in curriculum development in the school ()
11. Participate in community activities ()

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- 12. Know and teach children the culture and work that make their community special ()
- 13. Adopt the curriculum to the specific needs of the community where the school is located or where the students come from ()
- 14. Other, which? _____ ()

Q98. Concerning the characteristics the ideal teacher possesses, all directors think that understanding children needs and abilities as important. 4 directors think that have good classroom management skills, be informed of the new knowledge produced by research about teaching and learning, have a good personality, participate in community activities, and know and teach children the culture and work that make their community special as important.

Programs/ Options	Program directors			TOTAL
	CE	TC	DE	
1	1	2	1	4
2	1	2	0	3
3	1	1	0	2
4	2	1	1	4
5	2	1	1	4
6	1	1	1	3
7	2	2	1	5
8	1	1	1	3
9	1	1	1	3
10	1	1	1	3
11	2	1	1	4
12	2	1	1	4
13	2	1	0	3

99. How do people get to be that kind of teacher?
- 1. People have an ability to teach that is natural on them ()
 - 2. Teaching is like any other profession people have to dedicate long hours of study and practice to be good at teaching. ()
 - 3. By trial and error, on the job experience is what makes people good teachers ()
 - 4. By mastering their subject matter, the rest is not difficult ()

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5. By knowing pedagogical skills ()
6. By learning to be sensitive to the needs of their students ()
7. By watching others teach ()
8. Other, which? _____ ()

Q99. Concerning how people get to be that kind of teacher, 4 directors think that teaching is like any other profession people have to dedicate long hours of study and practice to be good at teaching, and by mastering their subject matter, the rest is not difficult as important factors. 3 directors also think that by knowing pedagogical skills as important.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	0	2	0	2
2	2	1	1	4
3	1	0	0	1
4	0	1	0	1
5	1	1	1	3
6	2	1	1	4
7	1	1	0	2
8	0	0	1	1

100. How successful is your program in producing such teachers?

- Very ()
- Somewhat ()
- Not successful ()

Q100. 4 directors think that they are very successful in producing such teachers.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	2	1	1	4
99	0	1	0	1

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101. How do you explain that?

1. The careful plan or program of studies ()
2. The dedication of the faculty ()
3. The preparation and quality of the faculty and program staff in general ()
4. The previous experience that the students/teachers bring with them ()
5. The student/teachers are mature people who think of themselves as serious professionals ()
6. The salary is higher after their finish the program ()
7. The successful completion of this program offers teachers an opportunity for promotion ()
8. The successful completion of this program allows teachers to move from a "difficult" school to a better situated school ()
9. Having a certificate/diploma from this program adds prestige to the particular teacher ()
10. A new policy by the government encouraging teachers to upgrade their knowledge ()
11. Other, which? _____ ()

What percentage of the teachers who enter your program have had a previous training in teacher education?

1. 0 % ()
2. 5-10% ()
3. 20-30% ()
4. 50% ()
5. 50-70% ()
6. 80% ()
7. 90-100% ()

Q101. Concerning the reasons for the success of the program, 3 directors think that careful plan or program of studies, and a new policy by the government encouraging teachers to upgrade their knowledge as important. 2 directors also considered the dedication of the faculty, the preparation and quality of the faculty and program staff in general, and having a certificate/diploma from this program adds prestige to the particular teacher as important factors.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	1	1	1	3
2	1	1	0	2
3	1	1	0	2
4	0	1	0	1
6	0	1	0	1
7	0	1	0	1
9	1	1	0	2
10	2	1	0	3

102. What is the main reason students/teachers enroll in your program?

1. The authentic desire to learn and be prepared as teachers ()
2. To get a new certificate or diploma ()
3. To be able to negotiate their transfer to another school ()
4. A policy mandated by the government stating that teachers need more training ()
5. This program gives them prestige. ()
6. Fellowships of other monetary help makes easier for them to enroll. ()
7. The poor learning experience that children are receiving in school nowadays and the government's concern to improve the situation ()
8. The new tendency in the government to move from a western style of teaching to a style more appropriate to Sri Lanka. ()
9. Unprepared teachers are being pushed aside by certified teachers not only by their experience or seniority. ()
10. Other, which? _____ ()

Q102. Concerning the main reason students/teachers enroll in the program, 3 directors think that the authentic desire to learn and be prepared as teachers and a policy mandated by the government stating that teachers need more training as main factors. 2 directors also think that to get a new

certificate, this program gives them prestige, and the poor learning experience that children are receiving in school nowadays and the government's concern to improve the situation as important factors.

Programs/ Options	CE	Program directors		TOTAL
		TC	DE	
1	1	1	1	3
2	1	1	0	2
4	2	1	0	3
5	1	1	0	2
7	1	1	0	2
8	1	0	0	1

103. Of all the things that prospective teachers need to know or be able to do, which single thing is the most important? (Mark with an "X" all that apply.)

1. Have good classroom management skills ()
2. Master the subject matter that is taught in elementary school ()
3. Understand and respect the hierarchical structure of schools ()
4. Be informed of the new knowledge produced by research about teaching and learning ()
5. Have a good personality ()
6. Be willing to learn from others and from his own mistakes ()
7. Understand children needs and abilities ()
8. Try different pedagogic strategies to make the students understand and learn ()
9. Get to know each one of the students to establish a relationship of trust with them. ()
10. Participate in curriculum development in the school ()
11. Participate in community activities ()
12. Know and teach children the culture and work that make their community special ()

13. Adopt the curriculum to the specific needs of the community where the school is located or where the students come from ()

14. Other, which? _____ ()

Q103. Concerning the most important thing that prospective teachers need to know, all director think that having a good personality as important. 4 directors also think that having a good classroom management skills, being informed of the new knowledge produced by research about teaching and learning, understanding children needs and abilities, participating in community activities, and participating in curriculum development in the school as important.

Programs/ Options	Program directors			TOTAL
	CE	TC	DE	
1	1	2	1	4
2	1	2	0	3
3	1	1	0	2
4	2	1	1	4
5	2	2	1	5
6	1	1	1	3
7	2	1	1	4
8	1	1	1	3
9	1	1	1	3
10	1	2	1	4
11	2	1	1	4
12	1	1	1	3
13	1	1	0	2

104. How do people get to be like that? In other words what factors contribute to the development of the ideal teacher you have just described?

1. Years of experience in teaching ()
2. Depends on the models they have had, if they have had good teachers, they very likely will be good teachers themselves. ()
3. Learning by trial and error ()
4. Theoretical and practical formal training that teaches them how to teach. ()
5. Good teachers are born, not made ()

6. Advice and interaction with other teachers about how
to improve their teaching ()

7. Other, which? _____ ()

Q104. Concerning the factors contribute to the development of ideal teacher, all directors think that theoretical and practical formal training that teaches them how to teach as important. 3 directors also think that years of experience in teaching, depends on the models they have had, and advice and interaction with other teachers about how to improve as important.

Programs/ Options	Program directors			TOTAL
	CE	TC	DE	
1	1	1	1	3
2	2	1	0	3
3	1	0	0	1
4	2	2	1	5
5	0	0	1	1
6	1	1	1	3
7	0	0	1	1

105. More specifically, in thinking about the process of learning to teach, how would you assess the contribution of a teacher education program like yours compared to other influences, such as interaction with peers, trial and error: learning in the classroom, ordinary exposure to youngsters, and the like?