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Swaziland

Educational **P**olicy **M**anagement and **T**echnology Project

Ministry of Education
Senior Staff Seminar
Enhancing Learning

Mountain Inn
18th June 1991

EPMT Inaugural Conference
Follow-up Seminar -Enhancing Learning

Date: Tuesday 18th, June 1991

Time: 9 a.m. - 4.30 p.m.

Venue: Mountain Inn

Participants:

- ✓ Mr G. Kunene Acting Principal Secretary (Chairman)
- Mr S. Simelane Director of Education
- ✓ Mr C. Magagula Chief Inspector (Primary)
- ✓ Mr E.V. Nkosi Senior Inspector English
- ✓ Mr S.S. Mkhonta Senior Inspector Maths
- ✓ Dr B. Dlamini Secretary Exams Council
- Mrs D.D. Nsibande Acting Director ETGPS
- Dr A. Passigna Continuous Assessment Adviosr, EPMT
- Mr C. Dawson Planning Advisor, RPU
- Dr L. Chu Guidance and Counselling Advisor, EPMT
- ✓ Mr Ginindza Principal Emlalati Dev. Centre
- ✓ Mr W.P. Yoxhall Faculty of Education, UNISWA
- Mr.M. Mabuza Director National Curriculum Centre
- Dr I. Allen Director INSET
- Mr R. Thompson Chief of Party, EPMT Project
- Dr R. Johnson Management Information Syst.Advisor, EPMT
- ✓ Mr I. Simelane Inset
- ✓ Mr P. Nhlengethwa Regional Education Officer, Manzini
- ✓ Mr A.J. Lukhele Regional Education Officer, Hhohho
- ✓ Ms. L. Phiri Inspector English
- Dr H. Bergsma Management Training Advisor, EPMT
- ✓ Ms. G. Caines Peace Corps (Mngt.Training) - Rapporteur

THEME: Enhancing Learning

AGENDA

- | | | | |
|-----|--------------------------------|------------------------|--------------------|
| 1. | Opening Address | Chairman | 9.00 - 9.20 a.m. |
| 2. | Theme paper | Director NCC | 9.20 - 9.45 a.m. |
| 3. | The Conference & Learning | Chief of Party
EPMT | 9.45 - 10.00 a.m. |
| 4. | General Discussion | | 10.00 - 10.30 a.m. |
| 5. | Coffee Break | | 10.30 - 10.50 a.m. |
| 6. | Formation of Discussion Groups | | 10.50 - 11.00 a.m. |
| 7. | Group Discussions | | 11.00 - 12.45 p.m. |
| 8. | Lunch | | 1.00 - 2.00 p.m. |
| 9. | Group Reports-Discussions | | 2.00 - 3.00 p.m. |
| 10. | Coffee Break | | 3.00 - 3.20 p.m. |
| 11. | Follow up actions | | 3.20 - 4.30 p.m. |

Opening of the Seminar

The seminar was opened by Mr G. Kunene, the Acting Principal Secretary, Ministry of Education.

After welcoming the participants he spoke about the emphasis which had been placed since Independence on the need to achieve 'Education for All'.

The 1985 National Review Commission also stressed the need for quality education which was relevant to the needs of Swaziland and the needs of students as individuals.

Mr Kunene continued as follows:

The NCC symposium held at the Swazi Inn on the 12th March discussed amongst other topics 'Curriculum in a Changing World'. It was agreed there should be a follow up to the symposium to allow for further discussion on the issues raised.

In some ways this seminar can be considered a follow up as it will deal with enhancing learning and the curriculum is a major tool towards achieving this.

The curriculum must reflect what is going on in the world around the school and it must help to produce school leavers who are equipped to cope with the world outside school.

Planning is now beginning for the extension of the 7 year Primary Education system into a 9 year Basic Education system.

When one talks about basic education, one must assume that it will equip school leavers with the basic skills to enable them to function in society and earn a living.

It must also provide the basis on which those students who can benefit from continuing at school can build.

To enable students with different talents and interests to develop these, the school curriculum needs to be widened to provide a variety of learning experiences to students.

This will require a more flexible approach to the school curriculum to allow for small group teaching and self-learning.

The talents and interests of students will be revealed through the Continuous Assessment programme which is to be introduced into schools and ETGPS will be able to use this information to guide students into employment avenues.

The EPMT Project is concerned with enhancing the efficiency and effectiveness of the education system. The products of the system are the school leavers, so the efficiency and effectiveness of the system can be judged by the quality of the school leavers.

The project will have an effect on this quality through each of its five components but particularly through the components which directly impinge on the learning process in the classroom.

The purpose of this seminar is to focus on the learning process and particularly on the specifics of the project input into the process.

Theme Paper

The theme paper was presented by Mr M.B. Mabuza, Director of NCC.

ENHANCING LEARNING

M.B. Mabuza
Director, N.C.C.

18-06-91

Like most developing nations, Swaziland is faced with a number of problems which make it difficult for all students to benefit maximally from the system. Overcrowded classrooms are a common phenomenon. High attrition rates and increasing numbers of poorly qualified or unqualified teachers plague the system. Disparities between urban and rural schools are a stark reality.

Indications are that more and more children are being born (Swaziland's population growth rate of 3-4% being one of the highest in the world), and enrollments will continue to swell. Furthermore, nowadays most parents are doing everything within their means to send their children to school because of the increasing realisation that education enhances the chances of a better future for them. Meantime, the insurmountable problem of shortage of resources will continue to hinder the government from providing ideal conditions in the schools.

In the face of the problems with which we have to contend, and in order to optimise learning in schools, this paper attempts to share possible solutions drawn from a plethora of research that has been conducted in the area of learning.

The paper is organized as follows:

1. Learning how to learn
2. Co-operative learning
3. The right of all children to succeed in school
4. Continuous assessment and the improvement of learning
5. Conclusion

1. Learning How To Learn

Learning how to learn is the most important skill an individual needs in order to survive in this rapidly changing world. Through the ages the theme of teaching the individual how to learn or how to think has dominated the efforts of acclaimed thinkers from Plato to Aristotle, to Aquinas in the Middle Ages, to John Amos Comenius during the Renaissance, to Martin Luther during the Reformation years, to Jefferson, Franklin, and Rousseau, advocates of the democratic revolution, to John Dewey and James, adapters of the method of science in the psychology of thought, and to such scholars as Montessori, De Beauvoir, Hutchins, Addler, Bruner, Schwab, etc.--all of whom spun different webs around the same subject. These scholars represent world views which have a wide span. Further, although they emphasize different aspects of thinking and recommend different ways of teaching it, they do agree that there is life after school, and that this being the case, the mission of the school should be to teach students how to learn or think. This observation is as true today as it was over the centuries during which the renowned thinkers lived. The question is how: how do students "learn how to learn," and how can the schools develop this skill?

Learning how to learn should not be thought of as a subject on its own. Rather, it should pervade all the conventional subjects like mathematics, social studies, languages, etc. It should pervade what is taught, how it is taught, and the environment in which teaching-learning activities take place. In a way, it suggests the teaching of conventional subjects in a different fashion than what we have been accustomed to, in a specially created environment using the appropriate teaching model. The following are some of the models (Joyce & Weil, 1986, p. 424) for teaching how to learn or think in specific ways:

Attack problems inductively
(Concept Formation Models)

Attain concepts and analyze their thinking
strategies
(Concept Attainment Models)

Analyze social issues and problems
(Jurisprudential and Role Playing Models)

Break set and think divergently
(Synectics and Group Investigation Models)

Other models are designed to teach students to:

Work together to generate and test hypotheses
(Group Investigation and Scientific Inquiry Models)

Reason causally
(Inquiry Training, Scientific Inquiry, Syntetics,
Group Investigation, Simulation Models)

Master complex bodies of information
(Memory, Scientific Inquiry, Group Investigation
Models)

Analyze personal behavior and set personal goals and
independent inquiry programs
(Nondirective Teaching, Awareness Training Models)

Analyze social situations and develop flexible
social skills (Role Playing, Assertiveness
Training, Simulation, Group Investigation,
Non directive Teaching Models)

General intellectual complexity
(Although all of the just-described models
contribute heavily to general growth in
thinking ability, the Cognitive Development and
Conceptual Models are specifically designed to
enhance cognitive growth.)

This is just part of the storehouse of models and
the types of intellectual growth the models can
stimulate. Some of them are designed to teach
particular types of thinking; others are designed to
teach thinking skills that are applicable in many
types of situations. For maximum effect, they are
generally used in combination; when they are, the
results can be very impressive.

Research has shown that the use of some of these
models or a combination of them has evident effects on
social behaviour and on lower-order and higher-order
achievement.

It is important to mention that for these models to
be used effectively, there has to be adjustment on the
part of the teacher. By teaching students now to reason
independently we increase their potential to teach
themselves and hence to share power in the instructional
situation. If, for example, we teach students to reason
inductively, it would be a serious contradiction to
reject the ideas they develop. Students have to be
guided to develop better ideas and encouraged to think
creatively. In this way they will be given the
opportunity to develop solutions that even the teacher
may not have thought of.

The uncertainty created by the learning models not only calls for adjustment on the part of the teacher, but also calls for a complete review of methods of inspection and supervision. It places the teacher, the headmaster, and the inspector on a humble plane of being learners.

The overall effect, however, is that if students are provided with basic learning skills, they become better equipped to learn on their own, and to take on a more active role in the education process.

2. Co-operative Learning

Sometimes called peer group learning, co-operative learning is one of the most effective ways of promoting learning how to learn. Co-operative learning develops leadership skills among students and develops attitudes that promote responsible membership in a complex society. It provides students with a non-threatening environment in which they can discuss freely and learn to respect one another's opinions. It helps develop attitudes and habits that promote mutual help and co-operation to achieve a goal, rather than destructive competition and divisiveness. Co-operative learning can be an effective solution to the problem of large, unmanageable classes and the shortage of teachers in Swaziland.

Co-operative learning is in keeping with Swazi culture. Invariably, a Swazi child comes from a large extended family where sharing, co-operation, and mutual help are part and parcel of everyday life. Ironically, when a child comes to school, he/she is introduced to a different world where the members of a class are ranked according to performance, with the one who scores the highest marks being the first, and the one with the lowest marks, the last. Examination results are reported in terms of first, second, and third classes. Competition, however, has its own place in school if the purpose is to compete for fun and enjoyment. But it can have a devastating psychological effect on the child who is average or weak in achievement.

Johnson and Johnson (1978) have discovered that co-operative learning has a number of strengths, including the following:

a. It enhances achievement in a variety of tasks.

It promotes mastery learning, retention and transfer of concepts, and the learning and application of rules and principles.

b. It enhances the ability to understand the perspectives of others.

One of the most critical competencies for cognitive and social development is the ability to understand how a situation appears to another person and how that person is reacting cognitively and emotionally to it.

The opposite of this is egocentricism, the embeddedness in one's own viewpoint to the point of being oblivious of other points of view and of the limitations of one's perspective.

Co-operative learning has been found to promote effective group problem-solving, positive attitudes toward others within the group and sound moral judgement.

c. It motivates students to learn.

For motivation to exist there must be two elements--namely, the perceived likelihood of success and the incentive for success. In other words, the greater the likelihood of success, and the more important it is to succeed, the higher the motivation. Research has shown that success is more important in co-operative learning than in competitive and individualistic learning situations.

d. It promotes students' involvement in instructional activities.

The success of instruction should be measured by the degree of student participation and involvement in the instructional activities and by the extent to which a student has benefitted from them. Research has shown that co-operative learning experiences result in greater liking for talking to the class about one's ideas. The student gets satisfaction and develops positive feelings towards his/her answers and the instructional experience in general. This, in turn, creates a more positive attitude toward the particular instructional task that the student is engaged in.

e. It enhances the development of a positive attitude toward teachers.

The importance of the students' having a positive attitude toward the teacher(s) cannot be overemphasised. The students' internalisation of values and attitudes, and their susceptibility to influence by the teacher may be directly related to the positiveness of the students' attitude towards teachers in general. Favourable attitudes towards teachers and headmasters make the child aware that these adults are important and that they care about the students not just as mentors but also as friends.

- f. It promotes students' desirable attitudes towards their peers.

Positive interpersonal relationships among the students are necessary for both effective learning and for general enjoyment of instructional activities in the classroom. Co-operative learning experiences result in greater liking for peers and more positive interpersonal relationships characterised by feelings of obligation to one another, friendliness, and mutual concern. Research has shown that when stigmatised students--i.e., students who are "different" or who belong to a different ethnic group--are placed in a regular classroom, they enjoy acceptance by other learners. The atmosphere in co-operative learning is supportive to stigmatised students who, as they interact with others in the group, tend to prove their value and become respected for their contribution to the learning process.

- g. It promotes students' self-esteem.

It is the responsibility of the school to be concerned with promoting self-esteem among the students. This is important to their psychological health and to their success while in school and, more importantly, after they leave school. Co-operative learning has been found to result in higher self-esteem in students throughout primary and secondary education.

- h. It promotes students' psychological health.

Co-operative learning lays a strong foundation for co-operative attitudes, emotional maturity, well-adjusted social relationships, strong personal identity and the ability to resolve conflicts between self-perceptions and adverse information about oneself.

The words of John Donne, a metaphysical poet, help to summarise the importance of co-operation:

No man is an island, entire of itself: every man is a piece of the continent, a part of the main.

Not only does co-operative learning improve instruction and enable the teacher to efficiently manage a large class--it is also a keystone for building and maintaining stable families and friendships, successful careers, important values, worthy community membership. It is a means for nurturing the individual's capacity to become a contributing member of society.

What then should be the teacher's role in co-operative learning?

Co-operative learning does not suggest that the presence of a teacher is not necessary. The teacher is indispensable. Co-operative learning is only a technique for helping teachers to efficiently manage large classes that would otherwise be unmanageable. The teacher's role in the co-operative learning situation is extremely important. Among the teacher's tasks are:

- o Specify instructional objectives to the learning groups;
- o Determine the group size according to the requirements of the task;
- o Assign students to groups using a method deemed suitable, e.g., random assignment, letting students choose whom they want to work with, or grouping them according to interests, etc.;
- o Ensure that groups are heterogeneous so that students are able to help each other;
- o Arrange the classroom such that groups do not interfere with the learning of others;
- o Provide the appropriate materials;
- o Explain the task and group goal and the level of performance expected of the group in line with the criterion-referenced evaluation system;
- o Observe the students and monitor group activities to ensure that the students function co-operatively;
- o Intervene when necessary to help the group solve whatever problems they encounter so that they can work together effectively;
- o Evaluate the work of the group using criterion-referenced measures;
- o Diagnose learning difficulties; and
- o Plan and implement remediation or enrichment activities as needed.

Instructional Materials

The need to meet the demands of overcrowded classes and the shortage of teachers make it imperative to produce self-contained, instructional materials for small groups, especially for the upper grades. Instructional games should provide excitement and motivation. Research has shown that they have been successfully used for mastering basic skills.

Programmed teaching, sometimes referred to as direct instruction (Thiagarajan and Paigna, 1988) is a new teaching methodology characterised by structured tutoring. This methodology has proved to be effective for teaching basic skills and concepts at the primary level. It is organised around self-contained modularized materials or "modules" which structure the instructional activities in the classroom by providing the lesson content, the teaching procedures, the items for the student responses, and correction procedures. The function of the teacher in programmed teaching is to accurately and effectively implement lessons developed by subject matter and instructional design specialists. Unqualified teachers and older students can fulfill these functions without extensive training. Programmed teaching has been successfully used to improve the quality of instruction in third world countries.

We are all aware that the cost of education has been growing steadily over the years. We are all witnesses to the controversy over the high prices of books. Producing additional instructional materials will certainly add to the already high book fees. But then, if students must benefit from the time and money invested in their education, parting with more money cannot be avoided. If these instructional materials are made reusable, and if they help improve learning, their cost-effectiveness will become evident over the years.

The 1975 National Education Review Commission's report emphasised the importance of providing educational facilities for all children of primary school age, hence the efforts and resources expended to achieve universal primary education by 1985. The 1985 National Education Review Commission report moved its emphasis from quantity to quality. The launching of the EPMT Project, in general, and continuous assessment, in particular, is part of the effort to achieve quality education. If the nation should be given quality education, the issue of cost cannot be avoided, especially if the quality education that we seek is to be provided in the context of serious teacher shortages.

3. Every child has the right to succeed in school, and the school should provide the necessary environment, human and material resources, and opportunities for all children--not just a select few--to succeed. Success in school and outside is enhanced when the individual has the skills and attitudes discussed above. Over and above this, the school should promote mastery learning.

Mastery learning presupposes the fulfilment of certain prerequisites, namely: the existence of units of the curriculum with clearly stated objectives, basic teaching/learning materials and criterion-referenced

evaluation system, and the teacher with well prepared lesson plans to achieve the objectives.

Recently, the National Curriculum Centre has been busy working on the instructional materials in order to improve them so that they meet these requirements.

Mastery learning also requires adherence to certain principles of teaching such as (a) active participation of the learner in his/her own learning, (b) effective utilisation of group work, (c) sound questioning techniques, (d) checking for understanding, and (e) retention.

(a) Active student participation

It is a known fact that even adults tend to learn more permanently when they have an opportunity to do something or perform a task. The importance of active participation in the learning process is clearly reflected in the Chinese proverb:

I hear, and I forget
I see, and I remember
I do, and I understand.

Because of conservatism (i.e., doing things the way my own teacher did them) and perhaps for fear that anarchy might result, for most teachers, participation in the child's own learning has been mental rather than physical. There is very little activity in our classrooms. The "chalk and talk" type of teaching with students quietly taking notes still dominates in Swazi classrooms.

(b) Small group work

This technique emphasises co-operative learning which has been discussed at length above. However, it is important to mention that the advantage of co-operative learning is that students can be organised in such a way that everyone of them is meaningfully engaged. Through the assignment of appropriate tasks, through systematic group procedures, every student is given an opportunity to assume a role in group activities. All students are then given the opportunity to contribute to the group effort and become involved in the successful achievement of the collective goal.

(c) Questioning techniques

The tendency of most teachers is to call more frequently on students who are high achievers--those who come up with the correct answers more quickly than the others and those who are articulate.

The majority of the students who may not be as quick or as articulate thus become resigned, discouraged, and generally unmotivated. The goal should be to involve all students in the discussion process. This can be achieved through a number of techniques, including:

- o The "wait time" technique in which the teacher waits for a few seconds more to increase the chances of all children--especially those whose ideas come more slowly or those who reflect a little longer--to respond to the question, instead of calling immediately on those students who are quick to raise their hands. This should dramatically increase the number and quality of the responses.
- o Avoiding starting a question with a student's name for, as soon as this happens, the other students stop listening.
- o Using the "signalled answers or choral response" mode in which a response is sought from the whole group and provided as a choral or signalled response--e.g., raise your left hand if you think 'yes' or your right hand if you think 'no.'

(d) Checking for understanding

To ask "Does anyone have any questions?" at the end of the lesson does not help much. Rarely does it elicit the kind of information the teacher can use to help the students. A sensitive teacher should always be on the lookout for signs of fading understanding. Diminishing participation, hiding in the back of the room, etc. are important clues to an alert teacher. The earlier a student's lack of understanding is detected by the teacher, the easier it is to remedy.

(e) Retention

Skills and knowledges worth acquiring are worth retaining. However, knowledge and skills are lost for one of two reasons: (i) either they are not well learned in the first place, or (ii) they have not been maintained. Retention can be achieved through teaching for meaning at the outset, and by creating opportunities for students to practise and apply what they have learned. Practice and application of a skill to many situations helps the children to cement it more permanently than if learned abstractly. Assigning activities and exercises is one way of achieving retention in students.

4. Continuous Assessment and the Improvement of Learning

The continuous assessment (CA) programme is based on the principle that testing is an integral part of the learning process and, as such, should result in the improvement of the quality of teaching and learning experiences in Swazi schools. CA makes use of mastery learning principles and procedures to ensure that the school provides learning experiences that will enable all children to succeed.

Tests are criterion-referenced--i.e., they are based on the instructional objectives.

In other words, under the continuous assessment programme, teaching and testing are objective-based. If the teaching was successful, all the learners would "pass" the test following instruction--i.e., perform satisfactorily in a test that measures the achievement of the objectives for the instruction just completed. The test results should then show which students did not master the objectives and therefore need remediation to help them achieve mastery so that they can go on to the next unit of instruction with the prerequisite skills or knowledge that will enable them to achieve the next set of objectives.

Testing, therefore, provides diagnostic information so that learning deficiencies become apparent and remedial measures are taken before the problem becomes more serious. This is very important especially in the learning of basic skills which are essentially hierarchical in nature, such as numeracy skills and the acquisition of communication skills (language and reading).

The other side of the continuous assessment coin is remediation, which also implies enrichment for the fast learners who may have mastered the skills but may need to work on more challenging material. Diagnostic information should optimally feed into the decisions that the teacher makes on the nature of the remediation/enrichment needed by specific individuals, the materials that are most appropriate, and the tutorial mode that will be most effective. If implemented effectively, the continuous assessment programme should enhance learning in its truest sense.

The child's CA records will also provide useful information concerning the child's specific strengths and weaknesses.

This information will make it possible to guide the student as he/she thinks about a future career. CA records can be an effective career guidance tool.

Not only does continuous assessment promote efficient teaching and learning, but it also provides valuable formative feedback to the curriculum and instructional developers concerning the effectiveness of the instructional materials produced at the National Curriculum Centre. In this way, the objectives, methods, and classroom activities suggested in the textbooks can be systematically and scientifically reviewed and improved.

The launching of the EPMT Project, especially the Continuous Assessment component, has placed a serious challenge to us as a Curriculum Centre. We are beginning to see flaws and the need for improvement in our own work.

5. Conclusion

In conclusion, I have attempted in this paper to show that enhancing learning can be achieved by involving the learner more deeply and meaningfully in his/her own education. It calls for a more democratic approach to teaching. Enhancing learning challenges us to go beyond the confines of the school and to encourage greater involvement of parents and the community.

Finally, having shared with you our vision for enhancing learning, I would challenge you to seriously consider the roles that should be played by the pre-service teacher training institutions, the inservice department, the inspectorate, and the Examinations Council in this endeavour.

Thank you.

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The EPMT Conference and Learning : Roy Thompson

Mr R.H.J. Thompson, Chief of Party of the Educational Policy, Management and Technology Project then related the theme of the seminar to the project's Inaugural Conference and the components of the project.

The Inaugural Conference of the EPMT Project was held between 22nd and 24th October 1990 at the Convention Centre of the Royal Swazi Spa Hotel. It was attended by over eighty educationalists.

The objectives of the conference were to familiarise a wide spectrum of people working in the education field with the project and its objectives, to give the technical assistance team an insight into the workings of the education system and to consider the development of the project and the constraints which it would face.

At the end of the conference recommendations related to each of the five components of the project were formalised.

This seminar is intended to follow up on the conference by further consideration of some of the recommendations made. As the overall objective of the project is to enhance learning the discussions at this seminar will be concentrated on enhancing learning and the recommendations which were specifically concerned with learning.

This focus will inevitably lead to a concentration on continuous assessment component of the project. However, guidance and counselling should also be given prominence as it should be concerned with directing learning towards a consideration of the future of the students in the world outside school.

Although the other three components of the project are more concerned with the effectiveness and efficiency of management, they inevitably must measure their success in the long term by their effect on the conditions of learning because management in the education context receives its justification only through creating the proper conditions for learning.

Whilst one would say, therefore, that all the recommendations which were agreed at the conference would have an effect on learning or the conditions in which learning takes place it is intended to concentrate particularly on those which have a direct relationship to learning so that there is time for meaningful discussions to take place.

The recommendations which we would like to present for further consideration are:

1. The pupil/teacher ratio needs to be strictly controlled.
2. A study should be mounted into the factors which affect learning.
3. Use small groups strategies and self study to enable teachers to manage large classes.
4. Testing alone cannot improve learning. The diagnostic aspect of the tests and the need for effective remediation needs to be emphasised.
5. The assessment process must not be so complex that it detracts from teaching.
6. The University and Teacher Training Colleges should be involved in the effort to introduce continuous assessment into the education system.
7. Job oriented activities should be an integral part of school activities.

It is hoped that in the group discussions ideas will be generated about how the Ministry of Education and the project in particular can address some of the issues raised in the theme paper and these selected conference recommendations. Too often discussions are held and issues are raised and then promptly forgotten until the next conference, seminar or symposium.

We hope in the last session this afternoon to actually identify follow up actions which should take place in order for enhancing of learning to take place.

Action from the Ministry of Education will be required, but it will also be required from the project. There are already mutterings about the amount of time people in INSET, NCC and the regions are being asked to devote to the project and it has not yet begun its full intervention into the system. So whilst you are deliberating about how to enhance learning please give some thought to the actual realities of the situation.

How can heads of schools and teachers be motivated to do what will be asked of them? How can regional education staff be stretched even further so that they become fully involved in the increased workshop activity which will occur? How can NCC and INSET staff carry the extra burdens which preparing teaching staff will entail? How can the teaching force, who to some extent feel cut off

from policy making, be given a sense of involvement in the development of new trends in education?

How can everybody who is working in the system be kept informed of what is going on ?

These are some of the questions which need to be considered if any plans for enhancing learning are to be successful.

There are many other things which need to be thought about. In this group are many of the leaders in Swazi education. It is up to you to point the way and give directions to put Swaziland on the high road of more effective education.

General Discussion

A general discussion followed and the following concerns were raised.

1. There is a need to introduce ideas about mastery learning and continuous assessment into the pre-service courses at University and the teacher training colleges. What linkages are there to achieve this?
2. Thousands of serving teachers need to be in-serviced in the ideas presented in the theme paper - What mechanisms exist?

Responses

- a) Use the existing LITS and DIES mechanism.
 - b) NCC subject panels should be in-serviced so that the ideas can be incorporated in future curriculum revisions.
 - c) Remediation will require the types of learning outlined in the theme paper. Remediation workshops to be carried out by the EPMT project should deal with methodology as well as content.
3. To what extent will the Ministry of Education be able to provide support to new approaches inherent in the project?

Responses

- a) The MOE should initiate studies in how to achieve enhanced learning.
- b) Good planning by the MOE will be required to ensure the institutionalization and development of new approaches initiated by the project.

Group Discussions

The participants were then divided into three groups and a list of proposed discussion topics was provided to form a basis for the discussions.

The three groups were:

Group 1

Mr G. Kunene (Chairman)
Dr I. Allen
Mr F. Nkosi
Dr W.P.Yoxhall
Ms. L. Phiri
Dr A. Pasiona (Secretary)

Group 2

Mr M.B. Mabuza
Mr C. Dawson
Mr P. Nhlengethwa
Mr Ginindza
Mr I. Simelane
Mr S.S. Mkhonta
Dr H. Bergsma
(Secretary)

Group 3

Mr C. Magagula (Chairman)
Mr S. Simelane
Mr A.J. Lukhele
Mrs D.D. Nsibande
Dr B. Dlamini
Dr R. Johnson
Ms G. Caines
Dr L. Chu (Secretary)

Proposed Discussion Topics

To help the groups get discussions started the following list of proposed topics was distributed:

1. How can remediation be fitted into the primary school curriculum?
2. Can testing and remediation training be carried out effectively using LITS and DIES?
3. How can test results be used to direct guidance and counselling in schools?
4. How can a subject - based curriculum be utilised to infuse career guidance?
5. Can the curriculum be broadened and made more flexible to allow for electives in Upper Primary?
6. How can the curriculum and the teaching process be adapted to emphasize how to find out rather than the learning facts?

Reports of Groups Discussions

GROUP 1

1. QUESTION: How can remediation be fitted into the primary school curriculum?

PROPOSED ACTION: The school day be lengthened by one hour to accommodate a study period in the middle of the day.

The group agreed that this would require a directive from the Ministry of Education. This period is to be used by each teacher to conduct remediation and/or enrichment activities in his/her own class. Special remedial materials will be developed for this purpose. These materials will be self-contained or modularized. Remedial materials for the lower primary grades will be mostly programmed teaching modules--i.e., modules that will contain the teaching content and the teaching procedures. Materials for the upper primary grades will contain the learning content (what the student is to learn) and the learning procedures (procedures that the student should follow when studying alone or procedures that the small peer groups should follow when they study together).

2. **QUESTION:** Can testing and remediation training be carried out effectively using LITS and DIES?

PROPOSED ACTION: The LITS and DIES should work hand in hand with selected teachers at each grade level to train the other teachers.

There was some concern about "watered down skills" in cases where the skills to be taught are specific to the grade level. There was a consensus that teachers of a specific grade might be a better trainer for other teachers of that grade--e.g., a Grade One teacher would be better able to teach other Grade One teachers how to teach beginning reading. However, the LITs and DIES should coordinate the training workshops, provide logistical support, and assist the teachers in training other teachers in their respective regions/schools.

3. **QUESTION:** How can pre-service teacher education accommodate Continuous Assessment to ensure that student teachers are taught skills needed to implement CA when they join the teaching force in the field?

PROPOSED ACTION: Continuous assessment concepts and processes should be integrated into the pre-service teacher education curriculum in order to prepare future teachers to implement the CA programme as developed by the Ministry of Education.

The following steps should be taken:

a. Conduct workshops for TTC and University lecturers and subject panels to inform them as fully as possible about the CA programme: the concepts, procedures, and types of materials involved, how these are similar to or

different from what they may already have in the curriculum, and how the curriculum may be modified.

b. Hold a seminar or seminars in which curricular changes can be fully discussed in order to produce a proposal on how the teacher education curriculum of TTCs and UNISWA should be modified.

c. Have the Ministry of Education TTCs and UNISWA submit the proposed curriculum to the Board of Affiliated Institutions for approval.

4. QUESTION: How can test results be used to direct guidance and counselling in the schools?

PROPOSED ACTION: Continuous assessment records should be analysed and included in the child's permanent record or student profile.

These records should be made available to the guidance counselor to enable him/her to be better informed about the child and thus be in a better position to provide the necessary guidance so that the child can make good decisions about what s/he would like to do after s/he graduates or leaves school, based on a knowledge of one's strengths and weaknesses, as may be revealed by the CA records.

*to provide
Matters
hand
Guidance
Counselor*

Guidance and counseling courses should be an integral part of preservice teacher education. Guidance teachers already in the field should be trained in career guidance concepts and procedures.

5. QUESTION: How can subject-based curricula be used to infuse career guidance?

PROPOSED ACTION: The primary school curriculum should incorporate concepts and information that will help the students make informed decisions about the best career to pursue after graduation.

This is very difficult to generalise. Different subject areas will accommodate these concepts in different ways. For example, Reading in English or Siswati could utilize stories that exemplify good judgements and career choices; Social Studies can include a unit on the different types of work or work opportunities available in the community; etc.

Integrate into each subject area the teaching of attitudes and concepts that promote wise career choices. The focus should not be on seeking employment but on developing correct attitudes and problem-solving skills that will enable the student to plan for alternate actions, given a problematic situation. That is, students should be taught skills in problem solving so

that they will survive and become productive citizens in a not-so-ideal career world.

6. **QUESTION:** How can the curriculum and the teaching process be adapted to emphasize 'how to find out' rather than the learning of facts?

PROPOSED ACTION: The teachers should first be trained to change their teaching methods. They should be trained how to ask good "thinking question"--i.e., questions that ask for students to make use of facts in order to answer questions that require higher-level cognitive skills, such as making inferences, giving conclusions, extrapolation, problem solving, etc. The students should also be trained to ask thought-provoking questions themselves. Systematically-designed remedial materials that develop these skills can do much to teach both the teachers and the students these skills. Inset lecturers should also provide professional/instructional leadership in this area.

7. **QUESTION:** Can the curriculum be broadened and made more flexible to allow for electives in Upper Primary?

RECOMMENDATION: We have to talk about the nine-year basic education programme in interpreting "upper primary." Already, the Ministry of Education has mandated a wide choice allowing for selection of subjects that are more suited to the students' abilities and inclinations in Grade 7-9.

The school should also provide for diversified extra-curricular activities and should encourage the students' involvement in community projects.

A word of caution: More electives might be contradictory to the MOE's campaign to improve teacher distribution and pupil-teacher ratios for greater cost-effectiveness.

GROUP 2

The group reviewed the issues in the documents, and discussion topics and decided to focus our discussion on Enhancing Learning by addressing four questions.

QUESTION: A) How can linkage be established between the project, MOE and the preservice training institutions i.e. Universities and Teacher Training Colleges in order to bring about programmatic and curricula change to facilitate mastery learning, cooperative-learning, continuous assessment remediation, management training and guidance and counselling?

QUESTION: How can linkages be established between the above and INSET & REO's ?

QUESTION: B) How can the efficiency of the educational system be improved through the suggested project components?

QUESTION: C) How can we involve heads and teachers in the school system to take ownership of the innovations being suggested by the project?

QUESTION: D) How can we introduce effective remediation for children in areas of knowledge skills and attitude change?

OBSTACLE:

There are a lack of effective linkages to bring about optimal programatic change and institutional action.

PROPOSED ACTIONS:

Establish linkages between member institutions of the Board of Affiliated Institutions to up-date them on project concerns.

ESTABLISH A LINK TO SERA

Tie in to the Research in Education at the University. Invite University Professors in Education to participate in our work.

Educate subject panels and redefine their roles and responsibility.

Hold focused seminars on project goals.

Improve efficiency of the school system. *More of them?*

Recommend that a clear statement of policy for increasing efficiency be established.

GROUP 3

1. QUESTION: On "remediation":

Remediation should be a central and integral part of the continuous assessment. Remediation should not just focus on students who failed the tests, but more importantly, should focus on teachers by using assessment results as feedback for improvement of their teaching. Providing ways and means to improve instruction and training teachers to utilise them should be the centre of the continuous assessment. With this in mind, remediation should be done by teachers themselves rather than leaving to specially assigned teachers.

Remediation materials should be designed by NCC and EPMT, and made available to teachers.

Communication to teachers and educators of what EPMT intends to accomplish and the upcoming training opportunities available to them is crucial. There is a

need to start a monthly or bimonthly newspaper to communicate with teachers educators, and the community at large.

2. **QUESTION:** Can INSET effectively train teachers to implement CA using LITS and DIES ?

The group felt that it could be accomplished. The group also felt that there are other effective avenues to accomplish this, such as teaching Primary teachers directly, and others we have not explored yet.

3. **QUESTION:** Can Career Guidance be infused into regular curriculum ?

Career Guidance can and should be infused into regular curriculum, in just any subject. To make the subject matter relevant to the work in the real world is the essence of Career Guidance.

4. **QUESTION:** Can Career Guidance teachers/officers use results of CA to do Career Guidance ?

The group felt that ideally, this could be done, provided there are enough well trained career guidance teachers. If this could be done, career guidance teachers can use students assessment results to guide their career decision making, and to be a part of the remediation team in providing academic and psychological services to those who needed.

5. **QUESTION:** Should upper Primary classes have elective subjects ?

The group agreed that elective subjects provide flexibility and that is good. They also agreed that the electives should be practical in nature, such as agriculture, home economics, carpentry, building, etc. However, the groups recognized the high cost involved in having these practical electives, in terms of facility, the need for small classes and teacher specializations.

The group did not reach a consensus as how flexible the elective system should go. While some believed that some basic courses such as Maths and English should stay as required, one member believed that all courses should remain electives for children to select or not to select.

6. **QUESTION:** How to teach learning to learn, rather than facts ?

The group ran out of time before they could deal with this question. They also felt that this was a big question and would need a separate seminar with the total time devoted to it.

Follow up Actions

It was proposed that the following actions should be taken:

1) Remediation

The difficulty of intergrating remedial work into the existing curriculum until new revision of the curriculum were under-taken was noted.

In the meantime, the extension of the school day by one hour was proposed. The use of this hour should be tried out in a few pilot schools, and management principles for it defined and taught during workshops.

The hour should be used both for remediation and enrichment and should be given a label which carried no stigma.

2) Linkage between the Project and ^{Teaching Training} ~~Testing~~ Institutions

The inter-action of the project with the University, Teachers Colleges and other institutions was considered to be essential as new teachers would need to be fully conversant with the new approaches being instituted by the project.

It was proposed that the Ministry of Education set up arrangements for on-going dialogue between the project and the institutions.

3) Subject Panels

It was noted that there were subject panels concerned with school subjects and subject committees concerned with teacher education subjects. Although there was provision for some common membership of the panels and the committees, it was felt that the work being undertaken by teacher education institutions needed to be better coordinated with what was being done in schools.

It was proposed that the panels and the committees be amalgamated and that a Teacher Education Panel with representatives of the institutions, NCC, INSET, and the Inspectorate should be set up.

4) Seminar on Efficiency

The efficiency on the education system and planning related to it had been hampered in the past by the lack of a reliable data base. The Management Information System being set up in the Ministry will provide the data base, but its utilisation at various levels within the system will need to be arranged.

It was proposed that a seminar be organised by the Ministry of Education to consider the efficiency of planning within the system, the flow of information and the utilisation of the data base.

5) Career Guidance.

a) The Ministry of Education had applied for the creation of 3 new Career Guidance posts in November 1990. These had not been accepted by the Ministry of Labour and Public Service.

It was proposed that MOE make strenuous efforts to get these posts created so that the Career Guidance training offered by the project could be utilised.

b) It was further proposed that a review of the approach to career guidance be undertaken before it was introduced into Upper Primary and Junior Secondary classes.

6) Awareness and Acceptance of the Project.

It was believed that the bulk of the teaching force was still unaware of the project and that if it was sprung on the teachers without a prior awareness campaign there would be resistance to the changes which would be required.

It was proposed that:

a) Ministry of Education and the project collaborate on resuscitating the newsletter which died 10 years ago.

b) that material about the project be included in the SBC education radio programmes.

c) that a simple fold over brochure on the project be produced.

d) the SNAT network be utilised.