

A STUDY OF THE FACILITATIVE ROLE OF THE TEACHER IN THE IMPLEMENTATION OF
GIFTED EDUCATION IN SCHOOLS

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Submitted in partial fulfilment of the requirements for the degree of
MAGISTER EDUCATIONIS in the FACULTY of EDUCATION at the UNIVERSITY of
PORT ELIZABETH

January 1989

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SUMMARY

When an educational change such as gifted child education is introduced into a school one of the key actors in its implementation on the micro-level is the teacher, whose attitude toward the change may be crucial as he is the ultimate user of that change. However, a teacher's workload is often heavy and this leaves him with little time or inclination to cope with the complexities of implementing a gifted child programme such as learning new skills and knowledge required by the programme.

Implementation - the process of putting into practice an educational change or activity new to those expected to change - should occur in a supportive environment, and assistance and training should be provided by change agents both external and internal to the school. These change facilitators though, are often remote from the practical problems and concerns which may be experienced by teachers during the process of implementation. It is also unlikely that they will make the day-to-day interventions which are targeted directly at teachers. Consequently, a teacher who is in close contact with other teachers, who has knowledge and experience of their problems and who can gain easy access to their classrooms appears to be in a viable position to act as a facilitator during implementation. The literature indicates that a teacher regarded as a charismatic, credible leader by his peers may assume the role of teacher representative/facilitator, thereby enhancing the process of implementation. He may emerge as a 'second change facilitator' who complements the facilitative activities of the principal. He can also compensate for what the principal does not do. There is little formal recognition or training for this role - an experienced teacher with the potential for becoming a change facilitator may assume this role. He may then respond to the concerns of his colleagues, function as a representative/role model, consult with teachers and reinforce their implementation efforts, coach and train them, provide opportunities for discussion and problem-solving and provide feedback on a day-to-day basis. Unlike those of other change agents, his interventions may be targeted directly at teachers.

The teacher's role as possible change facilitator during the process of implementation may be subject to limitations since it appears from this investigation that the degree to which he can make interventions is influenced by the change facilitative style of the principal. Principals, who emerge as key figures during the process of implementation, have been identified as managers, responders or initiators. The principal's style influences the type of interventions a teacher facilitator may make and the roles he can assume.

From this study however it appears that the role of teacher-facilitator is a viable and an important one especially in the phase of teacher use. He is able to maintain close personal contact with his colleagues, he is always available for consultation, he can provide direct, personal aid and he is able to target coaching and training activities directly at teachers. By providing a supportive environment and assistance at the classroom level a teacher can facilitate the implementation of a gifted child programme in a school.

OPSOMMING

Wanneer 'n onderwysverandering soos begaafdeonderwys in skole geïmplementeer word is die onderwyser een van die sleutelfigure in die implementering daarvan op mikrovlak. Sy gesindheid teenoor die verandering kan van kritieke belang wees, want hy is die eindgebruiker daarvan. Die werklas van onderwysers is egter swaar en derhalwe het hulle kwalik die tyd en ingesteldheid om die komplekse taak aan te pak om 'n begaafdeonderwysprogram te implementeer.

Implementering - die proses waardeur 'n onderwysverandering of aktiwiteit wat nuut is vir diegene wat dit in die praktyk moet invoer - moet in 'n milieu plaasvind waar daar ondersteuning en hulp is. Hierdie ondersteuning en bystand word dikwels deur veranderingsagente binne en buite die skool verskaf. Maar hierdie fasiliteators is dikwels afgesonder van die probleme wat onderwysers tydens die implementeringsproses mag ervaar. Derhalwe blyk dit dat 'n ervare onderwyser wat in noue aanraking met sy kollegas is, wat kennis dra van die probleme wat hulle ervaar en wat gereedlik toegang tot hulle klaskamers het die aangewese persoon is wat as fasilitator tydens die implementering van 'n begaafdeonderwysprogram kan optree. Uit die ondersoek blyk dit dat 'n onderwyser wat deur sy kollegas as 'n geloofwaardige leier beskou word die rol van onderwyser-fasilitator kan vervul en sodoende die proses van implementering kan bevorder. Hy kan die rol van 'n tweede veranderings-fasilitator vervul wat die aandeel van die skoolhoof tydens die implementeringsproses aanvul. Hy kan ook vergoed vir wat die skoolhoof nie doen nie. Daar is weinig formele erkenning of opleiding vir hierdie rol - 'n ervare onderwyser wat oor die potensiaal beskik om hierdie rol te beklee mag dit uit sy eie aanvaar. Hy kan reageer op die moontlike probleme wat onderwysers ondervind, as rolmodel funksioneer, met onderwysers raadpleeg, hulle implementeringspogings ondersteun, ~~onderwysers informeer op~~ lei, terugvoering op 'n dag-tot-dag basis verskaf en hy kan sorg vir geleentheid vir bespreking en probleemoplossing.

Die onderwyser se rol as moontlike fasilitator tydens die implementeringsproses kan egter ook beperk wees. Dit blyk uit die ondersoek dat die intervensies wat hy maak in 'n mate deur die fasilitatorstyl van die skoolhoof beïnvloed kan word. Die skoolhoof is 'n sleutelfiguur tydens die implementeringsproses en kan drie verskillende fasilitatorstyle openbaar: Bestuurder, respondeerder en inisieerder.

Uit hierdie studie blyk egter dat die rol van onderwyser-fasilitator tydens die implementeringsproses, meer in besonder die fase van onderwysergebruik, belangrik kan wees, omdat hy die persoon is wat in persoonlike aanraking met sy kollegas kom, maklik vir beraadpleging beskikbaar is, direkte, persoonlike hulp en bystand kan verskaf en aktiwiteite kan voorsien waardeur onderwysers kan leer deur te doen. Deur 'n milieu op klaskamervlak te verskaf waarin ondersteuning en hulp aangebied word, is dit moontlik om die implementering van begaafdeonderwys in skole te bevorder.

CHAPTER 1

PROBLEM FORMULATION

1.1 Introduction

'The most effective way of changing ideas is not from outside by conflict, but from within by the insightful rearrangement of available information.'

Edward de Bono

The phenomenon of implementation is complex - it involves many actors who interact to determine who gets what and where and how. Berman (1978:165) uses the concept "loose coupling" to indicate that each organization or actor involved in implementation acts more or less autonomously within a certain structure. As a result, a change which has been introduced may be implemented in different ways in different institutional settings. The extent to which this change is implemented successfully is determined, amongst other things, by the way in which external change agents intervene to facilitate implementation by for example providing a supportive climate to users of the change in their implementation efforts. These change agents, for example, have the responsibility of planning and organizing activities which make provision for training and coaching in the learning of new skills, they assist users as they put the change into practice and they are sources of support and guidance, especially when the change to be implemented is complex. Where there are obstacles to be overcome, such as a lack of knowledge or skills in the users, or insufficient time to learn new skills, external and internal change facilitators have the task of providing support to overcome them. It is also essential that they assess whether the change being implemented is consistent with that which was planned. Consequently, change facilitators play an essential role in enhancing implementation.

However, external facilitators, for example co-ordinators who are responsible for making interventions in several schools in a region, may have to cover large areas and are therefore not always available if an

individual school requires assistance. His task may then be shared by internal facilitators, for example the principal, vice-principal or department head who then become important sources of support and assistance. The principal, especially, is a key figure in educational change. Not all principals do the same things, though, nor do they necessarily assume the same roles during educational change.

Fullan (1982:138) cites Thomas, who identifies three types of principals: directors, administrators or facilitators, each of whom assumes different roles when implementing a change. As a result, this may necessitate the support of a further change agent who either complements what the principal does or who provides additional support to ensure that the educational change is successfully implemented and becomes a routinized part of the school programme.

1.2 Problem statement

Fullan (1982:107) states that "educational change depends on what teachers do and think." Change is a very personal experience - it may involve deep changes in teaching conceptions as well as change in teaching methods and materials. Changes of this nature therefore may involve high personal costs in terms of time and energy and may possibly represent a threat to a teacher's sense of adequacy (Fullan, 1982:114). Consequently a supportive climate should be provided in order to overcome the concerns and problems that teachers, as users of a change, may face. This support and assistance may be provided by an internal change facilitator in conjunction with an external facilitator. According to Lortie (1975:75,193) though, teachers sometimes prefer help from those closest to them in rank and often see one another as the primary source of useful ideas as well. This seems to suggest that an experienced teacher, who is knowledgeable both about the problematic classroom situation and the anxieties that teachers may experience when subsequently using a new programme, could possibly be a source of support, ideas and assistance. Since gifted child education is assumed to represent such a new programme or innovation the central problem of this study concerns the possible role a teacher may assume in facilitating the implementation of a gifted child programme in a school. The central problem can thus be formulated as follows:

Can a teacher assume a facilitative role with respect to the implementation of an educational change such as gifted child education at the school and classroom levels and what can this role be?

An attempt will be made to answer or clarify this question by addressing the following sub-problems:

1. What does the implementation of a change entail?
2. What does the role of an internal (and external) change facilitator involve?
3. What is the teacher's place in the structure of the school?
4. What are the basic elements or components of a gifted child programme that have to be in place in a school for implementation to occur?
5. Which possible interventions can a teacher employ to facilitate the implementation of a gifted child programme in a school?

By attempting to clarify these sub-problems it is hoped that an answer will emerge to the central problem which has been formulated.

1.3 Concept clarification

1.3.1 Facilitating role

The Oxford Illustrated Dictionary (1981:297) defines 'facilitate' as: make easy, promote, help forward. According to The New Collins Thesaurus (1985:23) the synonyms for 'facilitate' are: assist the progress of, ease, expedite, help and smooth the path of.

The person in a facilitating role therefore performs the task of providing assistance in the forms of, for example, active support and encouragement in order to familiarize fellow teachers with the contents of a proposed change. New skills have to be learned since the introduction of a new programme involves changes in, for example, teaching methods and materials as well as in teaching convictions. A facilitative role indicates smoothing or clearing the way in order to achieve this without causing teachers to feel threatened.

A facilitator has the task of providing guidelines with regard to implementation of the change. He employs interventions to fulfil his

facilitative role of smoothing the way and making it easier for users of a change to implement that which is new to them. Hall and Hord (1984:283) define these interventions as "an action or event or a set of actions or events that influences use of an innovation." This indicates that a facilitator should provide those actions which will lead to growth on the part of the users, thus enabling them to develop, for example, the knowledge, skills and attitudes they will require to implement a new programme.

1.3.2 Implementation

Berman (1978:160) defines implementation as "the carrying out of an authoritative decision." According to Fullan (1982:54) implementation is "the process of putting into practice an idea, program or set of activities new to people attempting or expected to change." There is emphasis on what changes in practice: an existing practice is altered in order that pupils more effectively achieve certain learning outcomes. Implementation is thus the actual use in practice, for the first time, of a proposed new or revised programme. This programme is put into practice in order that certain intended outcomes or achievements may be accomplished.

One of the important aspects which needs to be taken into account in the process of implementation is what basically has to change if the new programme is to be used effectively. Fullan (Hopkins, 1986:271) identifies the following basic dimensions which may be involved as a new programme is implemented:

- new or revised materials
- possible changes in the organizational or classroom structure
- new teaching approaches or strategies
- new or revised teaching conceptions
- diagnosing/assessment procedures

Leithwood and Montgomery (1987:31) have identified seven curriculum dimensions in which change can occur. These are: goals/image, objectives, content, teaching strategies, instructional materials and resources, assessment tools and procedures, and classroom management. Change could occur along all dimensions, or it could occur within a

a sub-set of these dimensions.

It should also be taken into consideration that there may be various factors, both planned and unplanned, which will influence the extent to which implementation takes place. These factors include, amongst others, how clear or complex the proposed change is, whether the users perceive the change as being relevant, the role which the principal plays in promoting the change and the support and aid which are provided by the external and internal change facilitators. Berman (1978:169) indicates further that if there is little or no consonance i.e. congruence or agreement between a new programme and a school's situation the school may exhibit reluctance to comply with the programme, resulting in a discrepancy between the planned programme and the extent to which it is faithfully implemented. This also represents an obstacle which may be overcome with the assistance of change facilitators.

Successful implementation therefore depends on how a local organization or school responds to or complies with a new programme. Consequently, it is essential that adequate support and assistance be given to prospective users as they translate a project into classroom practice, thus enabling them to overcome implementation difficulties they may experience. A more detailed analysis and description of the implementation process is presented in chapter 2.

1.3.3 Gifted child education

In South Africa the educational system attempts to provide each child with the opportunity of realizing his potential in accordance with his abilities. However, the regular curriculum does not fully meet the learning needs of a small group of children who exhibit exceptional abilities, aptitudes or talents. These children have the potential for outstanding accomplishment, consequently the school has the task of providing the optimal learning environment to meet their unique learning needs.

According to Renzulli (1977) individuals who have been recognized in society as being gifted are those who have produced something new in areas of human problem solving or artistic creation. They have also displayed the will, commitment and motivation to carry on despite the

frustration and difficulties they might have experienced. They reveal creative abilities and their major objective is to produce information, not to be consumers of it as the majority of children are. These children exhibit a cluster of three abilities:

- above average but not exceptional intelligence
- a high level of task commitment
- creativity

These three traits interact and it is this interaction which results in gifted behaviour.

As far as Maker (1982:3) is concerned, programmes for the gifted must be "designed to enhance or take into account what is special about these children," and she states that this can be done, for example, by modifying the regular curriculum in four areas, viz. content, process, product and learning environment, and by basing the programme upon characteristics unique to gifted pupils. For example, in order to modify the content of a curriculum - what is taught - so that it is appropriate for gifted pupils, content should be abstract and complex and a variety of subject areas should be included.

Feldhusen (1985, 4:9) believes that giftedness is produced when four components: high-level ability, self-concept, motivation and creativity interact. High levels of ability or aptitude, which can take many forms, are expected from gifted or talented pupils, since these offer potential for the development of performance or high-level productivity. With respect to self-concept, gifted pupils must see themselves as being able to produce new ideas, products or solutions to problems. They must thus be given the assistance and opportunity to develop a positive self-concept. Motivation, or task commitment as Renzulli (1977) defines it, is the willingness to work, the persistence to carry on and to pursue areas of study for long periods of time. This motivation is intrinsic - it stems from their own interests, natural curiosity, a need to explore and a need to gain more insight and knowledge. Feldhusen (ibid:9) defines creativity, the fourth component, as "the capacity to produce ideas or solutions that are unique, or novel, or unusual as well as worthwhile and adaptive." Furthermore, he states that creativity and giftedness, in a sense, are synonymous.

Giftedness, consequently, is a concept which covers more than merely exceptional academic ability and a high I.Q. There is no such person as a typically gifted pupil. Gifted pupils form a heterogeneous group, displaying a wide range of characteristics, abilities and aptitudes in both intellectual and non-intellectual spheres. Gifted child programmes may need to take a variety of exceptional abilities into consideration, for example, general intellectual abilities, specific academic aptitude, creative thinking, leadership abilities, abilities in the visual and performing arts and psychomotor abilities.

Gifted child education is thus education which makes provision for the unique learning needs and abilities of gifted children within a specific framework. The gifted child programme consequently provides suitable learning activities designed to stimulate gifted pupils, to encourage creativity and to enable them to acquire skills in high level thinking e.g. critical thinking, divergent thinking or creative problem solving. Basic components of a gifted education programme are described in chapter 5.

1.4 Methodology

An attempt will be made to clarify the problem as to whether a teacher can assume a facilitative role with respect to the implementation of gifted child education at the classroom level. By means of a literature study, logical analysis and a synthesis of findings, utilizing a matrix, a possible facilitative role for the teacher is elucidated. Within the limits of a treatise this study will not attempt to collect data or test the validity of these findings empirically. The results of this study may provide a theoretical framework for an empirical investigation of the role of the teacher as a facilitator.

1.5 Further programme

In the following chapter there will be a description of the implementation process. The role of an internal (and external) change facilitator will be investigated in chapter 3, while the place of the teacher within the structure of the school will be described in chapter 4. A conclusion will be made in this chapter as to whether a teacher may assume a facilitative role. In chapter 5 an analysis will be made of gifted child education in schools. Chapter 6 will investigate the possible role of the teacher as facilitator and the possible interventions he could employ. A conclusion will be made as to how viable and effective such a role would be in the successful implementation of gifted child education in schools.

CHAPTER 2

THE PROCESS OF IMPLEMENTATION

When a new programme has been developed careful consideration has to be given to its implementation in schools. The facilitation provided to users will be an important factor in determining the success of the implementation. In order to determine whether a teacher can fulfil a facilitative role during implementation it is firstly necessary to gain clarity about the nature of implementation.

2.1 Conceptualizations of implementation

The process of implementation can be conceptualized in different ways. Two of these are described below.

Leithwood (1982:253-256) explains that for implementation to occur the behaviour of the users should change in directions suggested by the innovation which has been adopted. Users have to overcome obstacles inhibiting implementation such as a lack of skills and knowledge. Leithwood and Montgomery (1987:4) subsequently identified three central concepts: growth, system, and obstacles and strategies in order to explain the process of implementation.

The concept of growth is central to Leithwood's conceptualization. He states that behavioural change of users is gradual and occurs in stages, and that this change of behaviour is dependent on the learning of new knowledge, skills, values and attitudes. The user moves in a desired direction until the differences between the existing and the innovative practices are gradually reduced. Thus the implementation of an innovation is viewed as growth, i.e. a movement from users' existing practices until they are able to use the new programme in a relatively sophisticated way (Leithwood, 1982:253-254).

According to Leithwood et al. (1987:6-7) a school consists of a collection of roles: principals, vice-principals, teachers, school advisers and other educational authorities. Therefore the second concept that is used in their framework is that of roles and the relationship among roles. Pupil achievement is the product of a set of recurring

patterns of behaviour which those who occupy education roles engage in, thus for pupil growth to occur there should be complementary growth on the part of those in education roles. A planned school change requires system growth as a basis to achieve pupil growth. Pupil growth, within this framework, is identified as the object of planned educational change. The conditions which are needed to foster this growth will provide the basis for defining which recurring patterns of behaviour are desirable among those who occupy the education roles. Leithwood et al. point out, however, that school systems are 'loosely coupled.' District, school and classroom levels of the educational organization usually function relatively independently, as do the individuals within each level, therefore those in superintendent roles, may have no basis for providing the skills contributing to improved teaching and effectiveness. If these relationships remain relatively independent among those occupying education roles there will not be much impact on pupil outcomes, even if the behaviour of education agents is altered. Thus there should be a process of organizational growth towards a more tightly coupled system in order that all those occupying education roles have an impact on pupil outcomes, not only the teacher.

In order to ensure both organizational growth and growth on the part of those expected to use a new programme obstacles inhibiting growth need to be identified and overcome. These obstacles are lack of knowledge or skills, a lack of incentive to implement the change, negative feelings about the change or a lack of resources or appropriate organizational arrangements (Leithwood et al.,1987:8).

Leithwood uses the concept of an Innovation Profile which is a description in terms of curriculum dimensions of the stages of growth of users as they progress to full use of a new programme. The Innovation Profile outlines the short-term goals which aid in planning implementation activities and also provides a clear statement of long-term implementation goals. The Profile identifies an initial stage which indicates teacher practices least like those required by a new programme, while intermediate stages, which are described in terms of teacher behaviour, indicate manageable steps that enable users to move to full use of a new programme. A User Profile plotting user practices onto the levels of curriculum dimensions in the Innovation Profile is drawn up

to determine whether users are moving in the desired direction. Obstacles inhibiting implementation may then be identified as well (Leithwood, 1982: 257-260).

A second conceptualization of implementation is implied in the Concerns-Based Adoption Model (CBAM) of Hall, Wallace and Dosstt (1973) which is illustrated in figure 1.

According to Hord and Loucks (1980:1) the Concerns-Based Adoption Model focuses on the needs of the individual who is required to implement a new programme. The teachers as users of a new programme are assumed to have concerns when using the new programme and to lack the skills to implement it. The two key diagnostic dimensions of the model which focus on the attitudes and performance of users are Stages of Concern and Levels of Use. A third dimension, Innovation Configurations, refers to variations of a new programme as it is being used (Hord and Loucks, 1980:2).

- Stages of Concern: Hord and Loucks (1980:5) explain that users who are faced with a new programme have concerns which can be identified. These concerns which are the reactions, feelings and attitudes experienced by users during the implementation of a new programme may range from concerns of self to concerns related to task and impact. Once users have become experienced at using the programme their concerns focus on the impact the change is having on pupils. This, in turn, implies a high level of implementation. Hord and Loucks, (1980:6) describe these concerns as follows:

6. Refocusing: Definite ideas about alternative possibilities and solutions to a new programme;
5. Collaboration: Users co-ordinate and co-operate with others when using a programme;
4. Consequence: Users focus on the impact of the innovation on pupils and on the relevance of the innovation;
3. Management: Users begin to use a new programme or innovation;
2. Personal: Users are uncertain about the innovation, about their adequacy to meet its demands and about their own role;
1. Informational: A general awareness and interest in learning;
0. Awareness: Little concern is exhibited about a new programme.

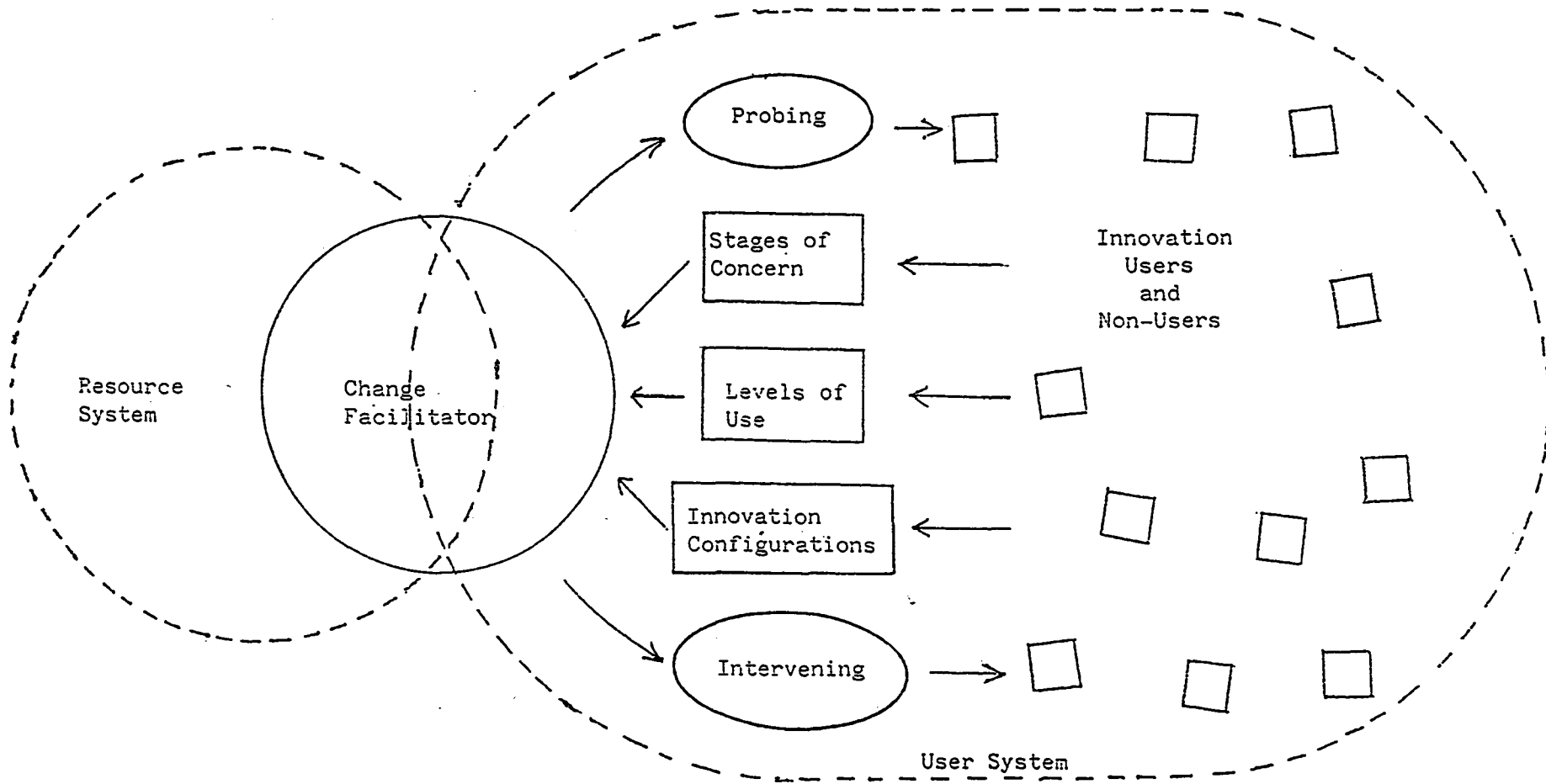


Figure 1 : The Concerns-Based Adoption Model

- Levels of Use: This dimension gives a description of how a user's performance improves as he becomes more familiar with a new programme and more skilful at using it. When users first begin putting a new programme into practice their level of use is generally at a "mechanical" level, but as they become more experienced and skilful their behaviour should change to a "routine" or "refinement" level. Hord et al. (ibid:10) describe the following Levels of Use:

VI Renewal:	The user looks for more effective alternatives to the established use of a programme;
V Integration:	The user makes deliberate efforts to co-ordinate with others when using a new programme;
IVB Refinement:	The user makes changes to increase outcomes;
IVA Routine:	Few or no changes are made by the user who has an established pattern of use;
III Mechanical Use:	A new programme is being used in a poorly co-ordinated manner;
II Preparation:	Users prepare to use a new programme;
I Orientation:	Users wish for information about a new programme;
0 Non-Use:	No action is taken with regard to a new programme;

- Innovation Configurations: The third dimension of the model focuses on the innovation itself and refers to the variations an innovation undergoes when users begin using a new programme (Hord et al.,1980:12, 13). Thus a new programme may be operational in several forms or have several different innovation configurations as it becomes translated into practice. Components of a programme may be modified to fit local needs, thus it is important to identify the range of variations or configurations of each component to ascertain which are acceptable and which are unacceptable. This entails constructing a checklist indicating these variations for each component of a new programme.

A further aspect of Hall and his associates' conceptualization of implementation is the Taxonomy of Interventions which presents change facilitators with a framework of different interventions to reduce

concerns and to increase levels of use from purely mechanical use until the programme is integrated with existing practices. Hall and Hord (1984:283) define an intervention as "an action or event or a set of actions or events that influences use of the innovation."

Different intervention levels are identified in the taxonomy namely policy, game plan, strategy, tactic and incident. The game plan components are: developing supportive organizational arrangements, training, providing consultation and reinforcement, monitoring and evaluating, external communication and dissemination (ibid:285-288).

2.2 The process of implementation

Berman (1978:160) defines implementation as "the carrying out of an authoritative decision." According to Fullan (1982:54) it is "the process of putting into practice an idea, programme or set of activities new to people attempting or expected to change," while Leithwood (1982:253) states that implementation "involves reducing the differences between existing practices and practices suggested by the innovation."

Berman (1978:157) makes a further distinction by indicating that the process of implementation consists of macro-implementation and micro-implementation. Additionally, each of these phases experiences its own problems, as they occur in different institutional settings i.e. macro-implementation occurs in an entire policy sector extending from government to local levels whereas micro-implementation occurs in a local setting, for example, a school, where users determine how the authoritative decision or new programme is to be carried out. Since outcomes depend on how the implementation process is carried out, implementation problems often lead to the failure of an educational change.

2.2.1 Macro-implementation

Berman (1978:165) explains that a policy sector consists of "diverse governments, bureaucracies, courts, public and private interest groups, local delivery systems, clients and individual actors." He states that these organizations form a loosely coupled structure i.e. each organization has its own culture and structure and consequently may act more or less autonomously within the overall macro-structure. The

process of macro-implementation may be problematic since communication difficulties may occur among the various organizations. These organizations may have conflicting goals and may lack financial resources as well. Moreover, as a policy decision passes through these organizations or passages it may be transformed, since the output of one passage becomes the input of the following one. The four passages Berman (1978:167) has identified as representing examples of loose coupling are:

- Administration: the authoritative decision leads to a government programme (e.g. a new educational programme);
- Adoption: the programme leads to the adoption of the programme at a local level;
- Micro-implementation: the locally adopted programme leads to an implemented practice;
- Technical validity: the implementation practice leads to outcomes.

Administration: The policy decision which has been adopted becomes translated into a specific programme. Difficulties arise when the policy decision is ambiguous, for example. Therefore it is assumed that programmes may be subject to cooptation i.e. only the innovation is changed significantly but there is no corresponding change in the organization (ibid:169).

Adoption: A problem may arise in this passage if there is little or no consonance between the local organization and the new programme. The local institution may then be reluctant to comply with or adopt the programme which may result in a discrepancy between the new programme as developed and its local use. A programme that is adopted, therefore, may not be implemented faithfully.

Micro-implementation: This is the third passage and occurs when users begin putting the new programme into practice. It is further characterized by three phases: mobilization or adoption of the change at local level, deliverer or user implementation and institutionalization at local level. During the process of micro-implementation a new programme may be characterized by mutation or adaptation i.e. the programme is put into practice differently in different institutions, since each local

organization or user may adapt the programme to fit its particular setting.

Technical validity: To ascertain whether a new programme is technically valid it is firstly necessary to determine whether the programme has been implemented as was envisaged by those who planned it. Then it is essential to evaluate whether the implemented programme has resulted in the expected learning outcomes (Taylor, 1988:10).

2.2.2 Micro-implementation

The process of micro-implementation takes place within a local organizational setting, i.e. the innovation is implemented by users at the level of the classroom or school. It may be subdivided into the phases of mobilization, user implementation and institutionalization.

Mobilization

Berman (Lehming and Kane, 1978:266-270) defines mobilization as "the process whereby the system prepares for a change in state." The decision to adopt an innovation at local level is included in this phase. Activities constituting mobilization are grouped into the following four functions: policy image development, planning, internal support generation and external support generation.

Policy image development involves activities such as becoming aware of a problem and searching for a solution, deciding to adopt an educational change, finding funds to innovate, and communicating what the intentions of the programme are to both internal and external audiences. A major activity in this phase is to define the image or assumptions about the new programme and communicate it to users, since lack of a common image may lead to conflict or failure.

Planning includes the assignment of personnel to assist with the change, determining objectives and allocating resources.

Internal support generation is essential in the form of support from school committees, co-ordinators, school board members, principals and teachers, among others. It is possible that individuals may have

different views with regard to the educational value of the innovation and the impact it has on them personally. As a result users may experience resistance to the change if there are differences between the perceived value and the impact on themselves. A new programme thus requires high levels of support from both users and administrators when it is to be implemented.

External support generation as support or lack of support from the local community in which the educational change is to occur may also have an effect on the change process. If the community is actively opposed to the innovation it can be seriously affected and may result in a failure to implement. Community support, however, may enhance the implementation process.

User implementation

This is "the process whereby the system attempts a change in state" (ibid:266). During this phase users are engaged in using the new programme or putting it into practice. Fundamental to the process are the activities of adaptation and clarification. Berman (1978:188) explains that as a new programme is translated into practical terms the users may either adapt the proposed programme to fit their behaviour or they may adapt their behaviour to the programme. He postulates that there are four paths users may follow when implementing an innovation:

- | | |
|-------------------------|---|
| Non-implementation: | there is no adaptation in either the proposed programme or in deliverer behaviour; |
| Cooptation: | there is no adaptation in deliverer behaviour but the programme undergoes adaptation to accommodate existing behaviour; |
| Technological learning: | the programme undergoes no adaptation but user behaviour is adapted to accommodate the programme; |
| Mutual adaptation: | both the programme and user behaviour undergo adaptation. |

Berman hypothesizes further that those programmes which undergo mutual adaptation produce the most effective outcomes.

Berman (Lehming and Kane, 1978:272) explains that clarification is also an essential activity during user implementation. If users are not clear about the innovation and how they are to use it, it may inhibit implementation. Consequently activities designed to facilitate mutual adaptation and to enable users to gain clarification are necessary. Furthermore, it is during this phase of deliverer implementation that users are likely to experience concerns with regard to how a programme is to be put into practice. This necessitates support activities and thus external and internal change facilitators assume various roles to assist users, and design implementation strategies to facilitate implementation, so that the change may become institutionalized or routinized.

Institutionalization

This is "the process whereby the system stabilizes a change in state" (ibid:266). In order to stabilize the innovation decisions need to be made to routinize and incorporate the new practice into the organization. According to Miles (1983:18-19) not only should support be provided in order to institutionalize an innovation but it is also necessary to ward off threats such as the cutting of funds or staff and administrative turnover. Fullan (1982:76-77) mentions further that a lack of funds, a lack of interest, lack of staff support and a lack of money for staff development, among others, may constitute a threat to the routinization or continuation of a new programme. Consequently, Miles (1983:19) explains that the following conditions are required for continuation of a programme: strong attention of administrators to supporting the innovation, extending use of the innovation to a large group, making provisions to protect the innovation against threats of staff turnover, ensuring that there are clearcut changes in the organizational structure and building the new programme into the curriculum.

Berman (Lehming and Kane, 1978:274) explains that the activity of assimilation is also essential i.e. users should assimilate what they have learnt during implementation in order to continue using the new programme.

These phases will be taken into account when elucidating the possible role of the teacher as facilitator of an innovation.

2.3 The dimensions of a planned change

Fullan (1982:54) explains that implementation consists of users putting a proposed new change into practice. Emphasis is laid on what changes in practice, i.e. what of an existing practice is altered to enable pupils to achieve certain learning outcomes more effectively. In order to commence using a new programme Fullan states that the initial implementation question is: "what aspects of current practice would change, if this programme were to be used effectively" (1983:217). Fullan (Hopkins, 1986:271) has identified five basic dimensions which may be involved:

- new or revised teaching materials
- possible changes in organizational or classroom structure
- new teaching approaches or strategies
- new or revised underlying conceptions or philosophies
- diagnosing/assessment procedures

Leithwood (1981:25) states that by defining those dimensions in which change may occur the chance of implementing a new programme is increased. Leithwood et al. (1987:31) subsequently identified the following seven curriculum dimensions:

- Goals/Image: The broad outcomes which pupils within a programme are expected to realize;
- Objectives: The intended outcomes of a programme which a teacher must work toward;
- Content: The topics and information utilized by the teacher to realize the objectives;
- Teaching Strategies: The various teacher practices which are designed to facilitate pupil learning;
- Instructional Materials and Resources: The variety and availability of materials and resources a teacher utilizes to achieve the objectives;
- Assessment Tools and Procedures: The ways in which a teacher determines the extent of the pupils' progress and achievement;

- Classroom Management: The practices a teacher uses to manage time and classroom routine.

Changes may occur in only a subset of these dimensions, but, by identifying and describing them, specific components to be put into practice may be defined, thus enabling users to implement incrementally.

The dimensions to be utilized for the purpose of this study are view/image of giftedness, objectives and content, teaching strategies, resources, organizational structure, and assessment or evaluation procedures.

2.4 Factors influencing implementation

Leithwood (1982:254) explains that teachers may experience difficulties or encounter obstacles which could impose barriers to their implementation efforts, thus causing them to experience possible negative feelings, resulting in resistance to implementing a new programme. These obstacles, among others, are:

- Lack of knowledge, skills and motivation: When teachers lack the necessary knowledge about an educational change or the skills required to use a new programme it may lead to a lack of motivation to implement that change;
- Inflexible organizational structure: Instructional materials and resources may be unavailable or the organization may be inflexible with regard to its structure in that, for example, differing grouping or organizational arrangements which a change requires are not allowed;
- Lack of incrementalism: When teachers are required to implement an educational change immediately they may lack the commitment to make that change work. The process of implementation takes time and if immediate results are required it becomes an insurmountable task;
- Lack of adaptation: Mutual adaptation between the proposed change and the teachers and the organization attempting to implement that change is required if the new programme is to be implemented successfully. Lack of adaptation can lead to conflict between the new and the existing practices.

Fullan (1983:2) illustrates a planned change as follows:

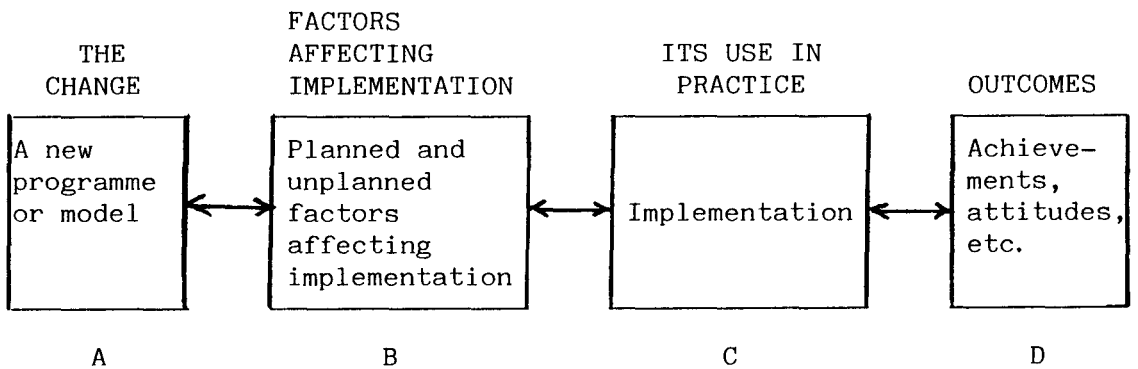


Figure 1 : Elements of a planned change

As box B indicates, there are certain factors, both planned and unplanned, which influence the extent to which implementation will take place. Implementation, itself, (box C) is the means whereby users achieve certain intended outcomes. The fifteen factors which may influence the extent of implementation have been organized into four main categories: characteristics of the change, itself, characteristics at the school district and at the school level and characteristics external to the local system (Fullan, 1982:55-75).

- A. Characteristics of the Change
 - 1. Need and relevance of the change
 - 2. Clarity
 - 3. Complexity
 - 4. Quality and practicality of program (materials etc.)

- B. Characteristics at the School District Level
 - 5. The history of innovative attempts
 - 6. The adoption process
 - 7. Central administrative support and involvement
 - 8. Staff development (in-service) and participation
 - 9. Time-line and information system (evaluation)
 - 10. Board and community characteristics

C. Characteristics at the School Level

11. The principal
12. Teacher - teacher relations
13. Teacher characteristics and orientations

D. Characteristics External to the Local System

14. Role of government
15. External assistance

A. Characteristics of the change

- Need: If an innovation which is adopted does not focus on an identified or priority need teachers may be unwilling to use it as they see no necessity for change. It is essential that specific needs are identified and linked to the selection of a programme;
- Clarity: Teachers need to be clear about what they should be doing differently and what the objective of a new programme is. False clarity may occur if the change is interpreted in an oversimplified way and implemented superficially without a corresponding change in teaching strategies and conceptions. Unclear and unspecified changes may result in feelings of anxiety or frustration;
- Complexity: This factor refers to how difficult the change is and the extent of the change required by users. The more complex a change is with regard to the skill required or the extent of alteration in teaching materials, conceptions or strategies the more difficult it is to implement;
- Quality and practicality of programme: This factor is concerned with the quality of the teaching and learning materials and resources. If these are of poor quality or are unavailable it may inhibit implementation.

B. Characteristics at the School District Level

- The district's history of innovative attempts: If teachers have had negative experiences of implementing change at other schools they may be apathetic with regard to implementation, whereas positive experiences enhance implementation;
- The adoption process: If an organization adopts a new programme for opportunistic reasons i.e. to gain funds or additional staff, users may be indifferent to implementation, while appropriate staff development activities may not be provided. Thus adoption of a new

- change should be linked to an identified need in a school;
- District administrative support: Central administrators need to exhibit specific forms of support in order to ensure change in a region. If these administrators do not understand the realities of the classroom situation and the difficulties involved in using the new programme implementation may be negatively affected;
 - Staff development and participation: Staff development is an extremely important activity with regard to implementing a change. Training activities should be provided to enable users to learn new skills and to alleviate concerns and anxieties. Interaction among users is also essential;
 - Time-line and information systems: Unrealistic time-lines may present an obstacle to implementation. Change takes time, thus users need to be given a realistic time to learn to use a new programme;
 - Board and community characteristics: If the community does not support the innovation it may inhibit implementation, whereas community support can have a positive effect. Schools situated in rural districts and consequently far from sources of support may also be hampered in their implementation efforts.

C. School-level factors

- The role of the principal: The principal as the leader of a school influences the likelihood of change. Without his sanction change cannot occur. If his actions indicate a change is to be taken seriously and if he supports teachers and understands their concerns it creates a favourable climate for implementation to occur;
- Teacher-teacher relationships: Interaction is a primary requisite when implementing a new programme. Users need to exchange views and ideas about the programme, not work as isolated individuals;
- Teacher characteristics and orientations: Both teachers and administrators should plan, design and prepare teaching materials together, observe each other teaching, talk about their teaching practices and provide evaluation of their teaching. There should also be a sense of confidence that the new programme can work.

D. The External Environment

- Government agencies: Education departments or school management boards may put pressure on regions and provide incentives, for

example additional staff, to change or adopt an innovation. However, if there is little or no congruence between the innovation and local needs implementation may fail;

- External assistance: The government is a major source of external assistance. The inducement of additional resources for adoption of a change may lead schools to implement an innovation, but if a change is adopted for opportunistic reasons in order to gain resources implementation may be negatively affected.

These factors should be taken into consideration when implementing an innovation since they may determine which is the most effective implementation strategy or approach to select to bring about implementation in a specific case. Furthermore, these factors may also determine the tasks change facilitators will be required to carry out and the roles they are expected to assume to facilitate use of a new practice. They are therefore significant in an investigation of the teacher's possible role as facilitator.

2.5 Conclusion

Because the process of implementation is complex it is essential that, after an innovation has been adopted by, for example, a school, appropriate interventions should be selected or designed to enable users to put a new programme into practice in a planned way and in a supportive environment. Change facilitators can play an important role in bringing this about. The role of change facilitators will therefore be described in the following chapter.

CHAPTER 3

THE ROLE OF CHANGE FACILITATORS IN THE IMPLEMENTATION OF AN INNOVATION

When an innovation is introduced into schools, support and guidance are required by those teachers attempting or expected to put this change into practice. This support and guidance can be provided by facilitators. Since teachers are important players during the implementation of educational change their commitment to and support of a new programme is essential if successful implementation is to be achieved. Even when there is commitment by the users of a new programme they still need the motivation to continue implementing in the face of difficulties and problems they may encounter in its daily implementation. It is in this respect that facilitators can play an important role. Since change is a process, not an event, purposeful actions are needed to facilitate the process of implementing a new programme in schools. These purposeful actions are taken by both external and internal change facilitators, for example by providing practical advice to teachers or by providing clear demonstrations of new skills to be learnt. There may also be a lack of credible or clear information about the proposed change or instructions may be inadequate, ambiguous or vague, therefore change facilitators are needed.

3.1 Key roles and tasks of change facilitators

There are a number of roles which may be assumed by different people in and outside the school to bring about change. Miles and Ekholm (Van Velzen, Miles, Ekholm, Hameyer and Robin, 1985:142-149), Hall, Rutherford and Griffin (1982:15-16), and Huling-Austin, Stiegelbauer and Muscella (1985: 7-8) have identified the following roles:

- Critic: A change facilitator has the task of reacting critically to the effectiveness of the programme being used and evaluating the performance of users. He may also define the objectives to be attained by a programme, and continuously assess whether these objectives are being accomplished.
- Inventor: An important task is to structure the school as a workplace. It may also be necessary to search for ideas and resources outside the school or to invent new solutions when existing resources may be inadequate.

- Goal-setting: The goals to be attained by a new programme should be set and communicated to users, and a description of a new programme given.
- Promoter: Pressure may have to be exerted for users to accept the innovation, the advantages of a new programme may have to be promoted and active efforts taken so that teachers begin to use a programme.
- Disseminator: A change may be accepted by only a minority of users, consequently it should be disseminated through a school or schools and made known to prospective users.
- Trainer: Facilitators will need to consider how a programme is to be actualized in a school, which skills, for example, are the most essential for initial use, which components of an innovation should be emphasized initially and how a change may be combined with the existing situation in a school. Provision must be made to facilitate use of a change by providing training and coaching activities so that users acquire, for example, new knowledge and skills, instructional assistance should be made available and new teaching roles may have to be clarified.
- Role model: According to Crandall (1983:8) teachers are natural emulators and are often willing to adapt or adopt the practices of a role model if these practices are both effective and successful. By assuming the role of representative an internal facilitator may have the opportunity to help teachers develop commitment to the change as well as promote interaction among users.
- Support/Consultation/Reinforcement: A facilitator may assume a supportive role by ensuring that users have the materials and resources required to implement a programme, by explaining how resources and materials are to be used and by helping users to try out materials. He has to be available for consultation when problems are encountered and should ensure that new skills which have been learnt are reinforced.
- Communication/Liaison Agent: An internal change facilitator has the task of complementing the communication activities of an external change facilitator, by establishing channels of communication between users and facilitators external (or perhaps internal) to a school, thereby making ideas, attitudes and problems known. Additionally, an internal facilitator may act as link between users and external or other internal change agents, keeping these change agents informed

about the progress of implementation, relaying information from change agents to users and helping to interpret or adapt information. He should disseminate information among users with regard to priorities and plans and may express users' concerns to other facilitators.

- Monitors and fosters interaction: A change facilitator should adopt a monitoring role by observing the progress users are making and by giving feedback as to progress which has already been made. He also has a role in fostering interpersonal relationships and promoting interaction among users so that problems are put into perspective and users are encouraged to work co-operatively.
- Group leader: If the task of implementing a new programme has been delegated to a committee an internal facilitator may function as a group leader, assisting and facilitating group decision making.
- Decision-making: Facilitators are required to make decisions about how the programme is to be implemented, who is to be involved and how much time is to be allocated for implementation.

It may not be possible for a teacher to fulfil all these facilitative roles. This study endeavours to identify facilitation roles which teachers can fulfil.

3.2 Participants in implementation

A number of people, both external and internal to the school engaged in implementing an innovation, are involved in carrying out the tasks and roles which have been described. Miles and Ekholm (Van Velzen *et al.*, 1985:146-149) identify various participants as shown in figure 1:

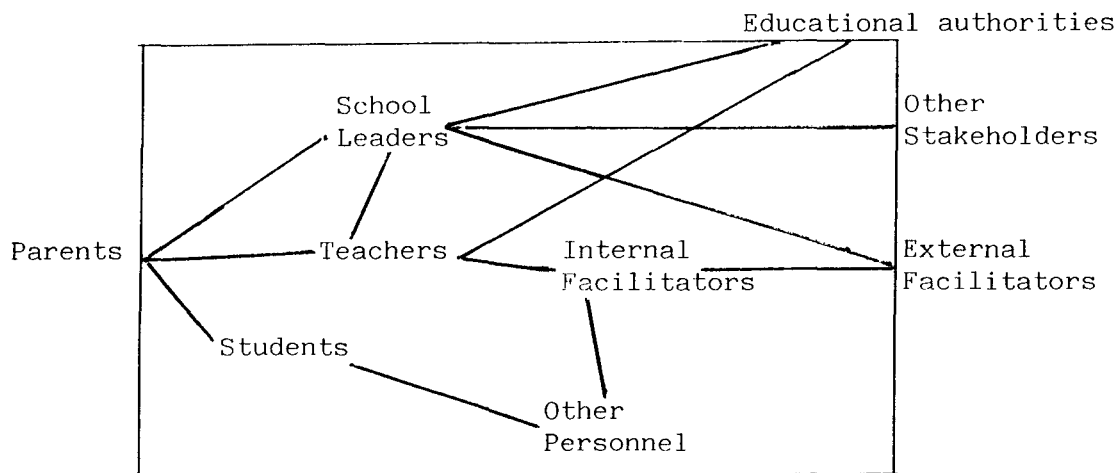


Figure 1 : Participants in local school improvement

- Educational authorities: This is exemplified by education departments. They usually have no direct links with schools. Their function is to advocate and adopt an innovation and promote its implementation;
- Other stakeholders: These are the professional associations, for example, the Teachers' Federal Council, the South African Teachers' Association and Suid-Afrikaanse Onderwysersunie which may promote and push an innovation or perhaps function as inventors or goal setters. They may also liaise with educational authorities;
- External facilitators: Co-ordinators at teachers' centres and Superintendents of Education may assume the role of external facilitators. Although they have a more direct link with schools they are usually unable to maintain contact with a particular school. They usually function as critics, decision-makers, promoters, and trainers and play a role in setting goals and also establish priorities;
- Internal facilitators: Examples of internal facilitators are principals, vice-principals, department heads or resource teachers. They may assume the role of critic, promoter, trainer, act as group leader, make decisions and liaise with external facilitators. They provide the supportive environment in which implementation should occur, monitor the progress of implementation, reinforce teachers' use of a change and interact with teachers putting a new programme into practice;
- Teachers: Teachers tend to be the direct users of a change and may resist it if the change is vague and lacks clarification or poses a threat to their sense of adequacy. It may be possible, though, that they have a limited role as representatives, group leaders, liaison agents or supporters;
- Parents: Parents are represented by the various school committees. They could act as resisters of change, but could also perhaps act as critics or participate in decision-making.

3.2.1 External change facilitators

External change facilitators are to be found in the provincial education departments, teachers' associations and teachers' centres. They normally supply general, not specific, support for implementation efforts. Their role involves contact with schools in the different regions and they usually interact with administrators and internal change facilitators. Because they are not involved with the day-to-day running of a particular

school they cannot be expected to have knowledge of the daily problems and concerns which may be encountered or experienced by individual teachers as they use a new programme. After external change facilitators have adopted an innovation their task is to provide overall support, and training which focuses on common problems encountered by teachers as a group. Because there may be a lack of frequent, personal interaction between an external facilitator and users, an internal facilitator who can liaise with users and external facilitators is also required.

3.2.2 Internal facilitators

Internal change facilitators are primarily concerned with internal operations. Their role is to facilitate the implementation of an educational change which has already been adopted by educational authorities. They are able to interact with the users of a change and are available to help users solve possible implementation problems and difficulties as they may arise during the implementation process in a school. External facilitators, in contrast, assume responsibility for the overall implementation process in the schools of a city, district or region. The persons assuming the role of internal facilitator may be, among others, principals, vice-principals or department heads. Bauchner, Eisman, Cox and Schmidt (1982:55) found that the more help teachers received from internal facilitators the more faithfully the change was implemented.

3.2.3 The principal as a change facilitator

One of the most important figures in any change effort is that of the principal. As formal leader of a school he plays a key role in the implementation of an innovation because, if he is not directly involved in facilitating the use of an innovation his sanction, nevertheless, has to be given for implementation to occur. Furthermore, not all principals react in the same way as to how an innovation is being implemented. The support and assistance they provide and the way they interact with staff members may vary in each school. Consequently it appears that their leadership style has an influence on choice of change facilitators and on how the innovation is implemented. Hall and Rutherford (1983) subsequently identified three change facilitator styles which principals may possibly assume when they facilitate use of an innovation. These

are: responder, manager and initiator. Since principals may therefore differ in the way they facilitate implementation the implication is that other additional internal change agents may also have a role to fulfil.

- Responder: According to Hall and Rutherford (1983:6) principals who have a responder change facilitative style believe that their main role is an administrative one to ensure that the school runs smoothly. They regard teachers as being professionals and place a great deal of emphasis on allowing either teachers or else some other change agent to take the lead and they give them the opportunity of making their own decisions. Before making decisions themselves they give others the opportunity of making their opinions known and they are flexible with regard to making changes in their decisions. Teachers are also granted independence and autonomy to a large extent.
- Manager: Hall and Rutherford (1983:7) explain that principals with a manager change facilitative style keep teachers informed about decisions and respond to concerns teachers may have. If a new programme has been adopted by a school they can become involved with teachers to ensure that it is implemented. Although they do most of the intervening themselves, they do share some responsibility, but they stay informed with regard to how this responsibility is being handled. Generally, principals with this change facilitative style accomplish many of the tasks themselves, but they take the ideas of the staff into consideration.
- Initiator: Principals who are initiators take the lead in order to make things happen (ibid:7), initiating change to achieve maximum school effectiveness. They have strong convictions as to what teaching or good schools should be like and they will attempt to attain their goals with regard to what they believe is best for their pupils. Consequently they will initiate an educational change, even when such a change is not easy to implement. They provide the teachers with direct support and ensure that provision is made for the development of teacher knowledge and skills, although they may delegate some responsibility to someone carefully chosen.

A second change facilitator may be required during implementation and will fulfil different roles depending on the facilitative style which a principal assumes. For example, if the principal is an initiator a

second change facilitator may possibly complement the principal's actions by providing interventions to different teachers individually, whereas if the principal is a responder a second change facilitator may be more active than the principal, providing additional interventions to compensate for what the principal does not do. In contrast, if the principal is a manager who wishes to do everything himself a second change facilitator may provide the fewest number of interventions.

3.3 Conclusion

Users in a change process require a supportive environment in which to learn new skills. Facilitators therefore have various roles to fulfil, directly or indirectly, by providing training activities, setting goals and clarifying and interpreting objectives, relaying information about an innovation and monitoring the users' progress. Difficulties and problems may be encountered as users put a new programme into practice and these may be resolved by a facilitator who intervenes with assistance and guidance. Without the aid of, especially, internal facilitators there is little likelihood that a new programme will be implemented successfully.

In the following chapter the teacher's place in the structure of the school will be described in an attempt to obtain more clarity as to the possible internal facilitative role which he may play during the implementation of a new programme.

CHAPTER 4

THE TEACHER'S PLACE IN THE STRUCTURE OF THE SCHOOL

Traditionally, the teacher is confined to the classroom where his role is that of helping children to master certain knowledge and skills and acquire certain attitudes. When a change is introduced into a school it may possibly affect his role and his teaching methods, the teaching materials he uses and the convictions he has about teaching and the child, since he is, initially, impacted most by a change. This implies, amongst others, that his attitude is crucial to the successful implementation of a changed programme (Rutherford and Murphy, 1985:2). Fullan (1982:107) cites, further, that the working conditions of teachers and the problems they may encounter during the process of implementation could contribute towards the success or failure of an educational change. Additionally, because of the place he occupies in the structure of a school, certain constraints may be placed on the facilitative roles a teacher can fulfil.

4.1 The structure of the school

The school is an organization which has its own structure and culture, but it also has a place in the social and local sphere. Consequently it may be vulnerable to outside influences. Within the school itself there are diverse groups: pupils, teachers, principals and administrative officials. These groups differ as to the extent of involvement and to the degree in which they contribute towards teaching and learning, but they, nonetheless, interact with one another to form a common language and value system. This value system, in turn, determines to what extent change will take place: a change which is contrary to the existing culture of a school could be subject to resistance. The central activity of a school is that of teaching. Therefore, because teachers are the ultimate users of the new programme, having to put it into practice, they will largely determine how well it will be implemented.

4.1.1 The school

The school may be defined as an institution where teaching-learning activities are organized in a planned manner, with the purpose of helping children to become proper adults. The school, therefore, has a

pedagogical structure: it is characterized by teaching and learning activities in which pupils are helped to develop, with respect to the cognitive, affective and psychomotor dimensions of their persons.

Since this is the central activity of the school, trained educators become an essential part of its structure. In the traditional school there are various subject or academic disciplines which are grouped together. According to a typical hierarchical structure, principals occupy leadership positions, together with vice-principals, followed by department heads, teachers and then pupils. Huling-Austin et al. (1985:20) use the following diagram to illustrate this hierarchical structure:

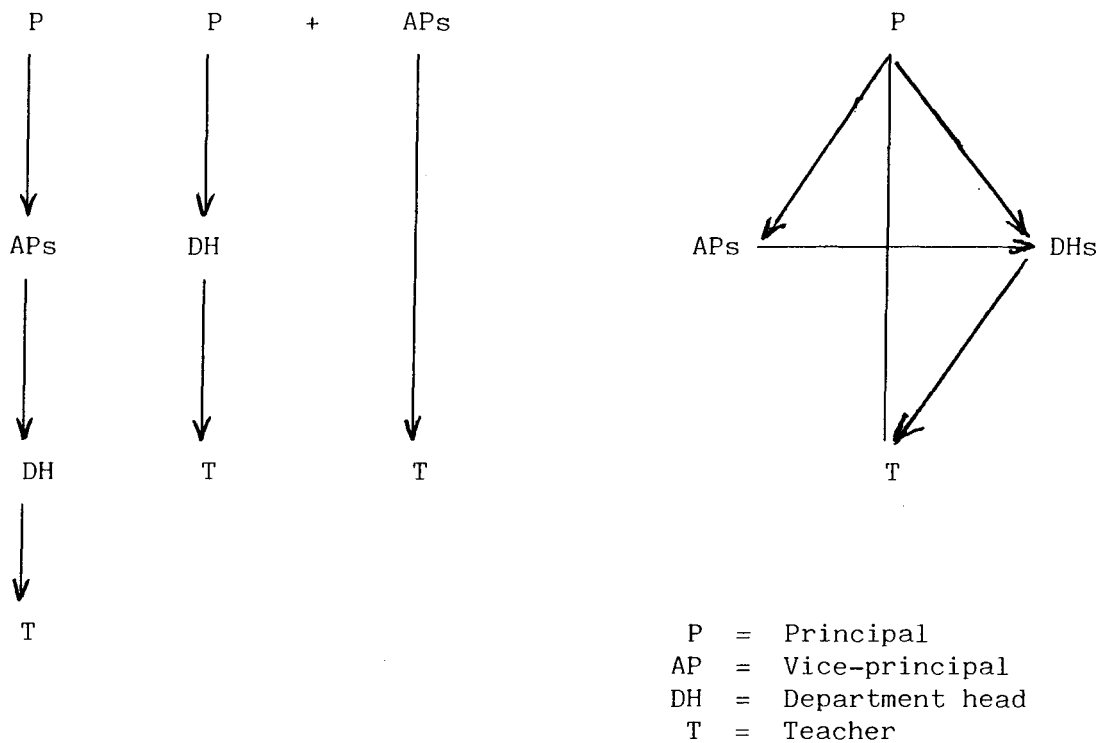


Figure 1 : Variations on administrative patterns

4.1.2 The Principal

Principals head the hierarchical structure as they provide formal educational leadership in a school. Fullan (1982:132) cites Sarason who indicates that principals usually spend their time on administrative matters and on maintaining order and discipline. They have been identified as the key to educational change in a school, although, according to Hall, Rutherford and Griffin (1982:5) they differ with regard as to how they facilitate change, as has been indicated in chapter 3.

4.1.3 The Vice-Principal

The vice-principal ranks immediately below the principal and acts for or deputises for the principal in the latter's absence. He is also in a key leadership position and thus functions in an administrative capacity as well. According to Hord et al. (1984:5) vice-principals aspire to be principals and are, therefore, concerned with administrative affairs. Consequently they may not respond specifically to the needs and concerns of teachers during the implementation of an educational change.

4.1.4 The Department Head

Department heads are subject specialists; the majority of them are also classroom teachers. This gives them a dual responsibility: not only do they have department-related obligations, but they must also devote time and energy to classroom teaching and pupils (Hord and Murphy, 1985:11). Their duties include keeping the principal informed about their departments and monitoring teachers in their departments.

4.1.5 The Teacher

Loucks et al. (1982:7) define the teacher as "an individual who provides service directly to a student through the use of a curricular or instructional practice." In the school the teacher's authority normally extends only to the pupils and he is answerable to the principal, vice-principal and department head. Much of his time is spent in a classroom engaged in the activity of teaching pupils, consequently he has fewer opportunities of gaining access to innovations or of facilitating educational change. Usually, he is more concerned with the immediate issues and problems in his classroom than with introducing or facilitating change, and, as Lortie (1975:185) explains, he is reluctant

to use the time and energy he has available for teaching, on a variety of organizational tasks.

A problem that teachers in schools in especially the rural areas may be confronted with is the fact that they struggle with their concerns and problems privately since they may be unable to interact with teachers in other schools because of the distances between rural schools. It is thus not always possible, as in the case of urban schools with their proximity both to teachers' centres and to one another, for them to reflect on or review their classroom practices, discuss their work or share their ideas. In many schools, too, lack of time and unwanted or unproductive interruptions which disrupt work may cause working conditions to be difficult. It is also possible that teachers may experience uncertainty as to whether they are achieving something worthwhile in the classroom as well. To this can be added classroom management problems and discipline, the difficulty of teaching in a crowded classroom, unrewarding teaching experiences and the intangibility of feedback. This may result in teacher stress, or a negative attitude, a decline in motivation, apathy and resistance (Fullan, 1982:108-112).

Educational change and its implementation becomes problematic when teachers have to change their convictions and ideas about teaching or when they have to learn new skills. This involves high costs in personal time and energy especially if the change to be implemented is not easily translated into practice, is complex or lacks practicality, or if there is a lack of clarity with regard to implementation. Fullan (1982:119) comes to the conclusion that "because of their cultural conditions and practicality concerns, most teachers do not take the initiative to promote changes beyond their own classrooms."

4.2 The teacher and educational change

When an educational change is imposed on teachers who have played no part in its promotion it may be subject to resistance. Most educational changes come from outside resources and teachers are then expected to put them into practice. Fullan (1982:120) has identified three situations in which teachers can find themselves within the context of educational change, namely:

- as recipients of change
- as advocates or promoters of change
- as members of teacher societies

4.2.1 The teacher as the receiver of change

A teacher's immediate concern is to deal with the day-to-day needs of his pupils, not to impose change in the school. He may also have limited access to innovations since his professional contact with the world outside may be limited to meetings at teachers' centres, for example. An educational change is usually adopted by an Education Department and orientation courses presented for co-ordinators or school principals, for example, to acquaint them with the change. Principals may then make the change known to teachers with the assumption that they will implement them. It appears, therefore, that teachers do not take much initiative in promoting change beyond their own classrooms. However, as the users of the change they largely determine the degree in which a new programme will be accepted and put into practice.

4.2.2 The teacher as the promoter of change

Teacher representatives from schools have the opportunity of serving on Departmental Study Committees, for example, and may thus have access to innovations which they may advocate as being desirable for schools. However, change cannot occur without some sanction from the principal, therefore an essential task for advocates is to obtain support from administration.

4.2.3 The teacher as a group member

Professional associations like the South African Teachers' Association or Suid-Afrikaanse Onderwysersunie are normally concerned about salary, job security issues and fringe benefits. However, these associations could also bargain for "procedures that would allow innovations to be implemented collectively by teachers" (Fullan, 1982:126). These professional associations have teacher representatives who could negotiate the "whats and hows" of an innovation. Consequently the teacher as a group member may have the opportunity of promoting and supporting change.

It would therefore appear that, although a teacher is primarily a recipient of educational change, he nevertheless has the opportunity as

teacher representative of gaining access to innovations. This implies that he may, as a result, perhaps be able to assume a facilitative role at the classroom level in a school which has adopted a new programme.

4.3 The possibility of the teacher as facilitator

As was described in chapter 3, principals may assume different change facilitative styles during implementation and may thus intervene in different ways during the implementation process. Fullan (1982:132) described that principals may spend more time on administrative matters while according to Hord et al. (1984:2) principals tend to take a more directive planning approach, provide overall guidance or intervene through the office. If a principal is, moreover, a responder, for example, he may not provide sufficient or adequate interventions to facilitate use of a change, consequently the aid of a second change facilitator may be required. Hord et al. (1983:10) subsequently found that many of the interventions these second change facilitators made were in the classroom. As a teacher has much easier access to classrooms than have other internal change facilitators, and also has more contact with fellow teachers, the implication is that he, too, may be able to assume a facilitative role, albeit a limited one, because of the place he occupies in the structure of the school. According to Hall and Guzman (1984:20) fellow teachers can act as a source of opinion, support and information, while the data collected by Rutherford and Murphy (1985:25) with regard to teachers and change indicate that teachers are more receptive to change when the source is an individual teacher. Crandall (1983:8), too, indicates that teachers may be willing to adopt the practices of a peer teacher if they judge these practices as being successful and effective. Since teachers are important players during the implementation of educational change their commitment to and support of a new programme is essential if successful implementation is to be achieved. Thus internal facilitators who are able to intervene directly at the classroom level would appear to be in a viable position to support and assist teachers and help them develop commitment to the use of a new practice.

4.4 Conclusion

Since the data collected by various researchers, for example, Hord et al. (1984), Huling-Austin et al. (1985) and Hall et al. (1982), appear to support the fact that a teacher, despite the place that he occupies in the structure of the school, could assume the role of facilitator at the level of the classroom during the implementation of an innovation, the various roles assumed by change facilitators will be considered in conjunction with basic components of a gifted child education programme. It may then be possible to determine how, if at all, a teacher may assist in facilitating use of a gifted child education programme and in which of the phases of micro-implementation, namely adoption, teacher use or institutionalization of this programme he has a role to play. In the following chapter an analysis of gifted child education provision will be made as this study focuses specifically on facilitative actions by the teacher with respect to such a programme.

CHAPTER 5

THE COMPONENTS OF A GIFTED CHILD PROGRAMME

Gifted child education is assumed to represent an innovation in the South African educational context. According to Leithwood (1982:247) the term "innovation" may be defined in many ways. He labels innovations as "only those things that have novel features for the individuals who choose to use them," and then gives a further definition from a teacher's viewpoint as "part of a solution to a classroom problem" that a teacher may wish to resolve. By identifying and describing the components or dimensions of an innovation (Leithwood et al., 1987:31) users get a clear idea of what the innovation entails and can better prepare for its implementation.

5.1 Components of a gifted education programme

To analyze whether a teacher has a possible facilitative role in the implementation of a gifted child programme at the school and classroom level it is necessary to outline and describe those elements or components fundamental to such a programme. Identifying these components will aid in the elucidation of possible interventions a change facilitator may employ. Taylor and Van der Westhuizen (1983:68) illustrate the basic components underlying gifted child education as follows:

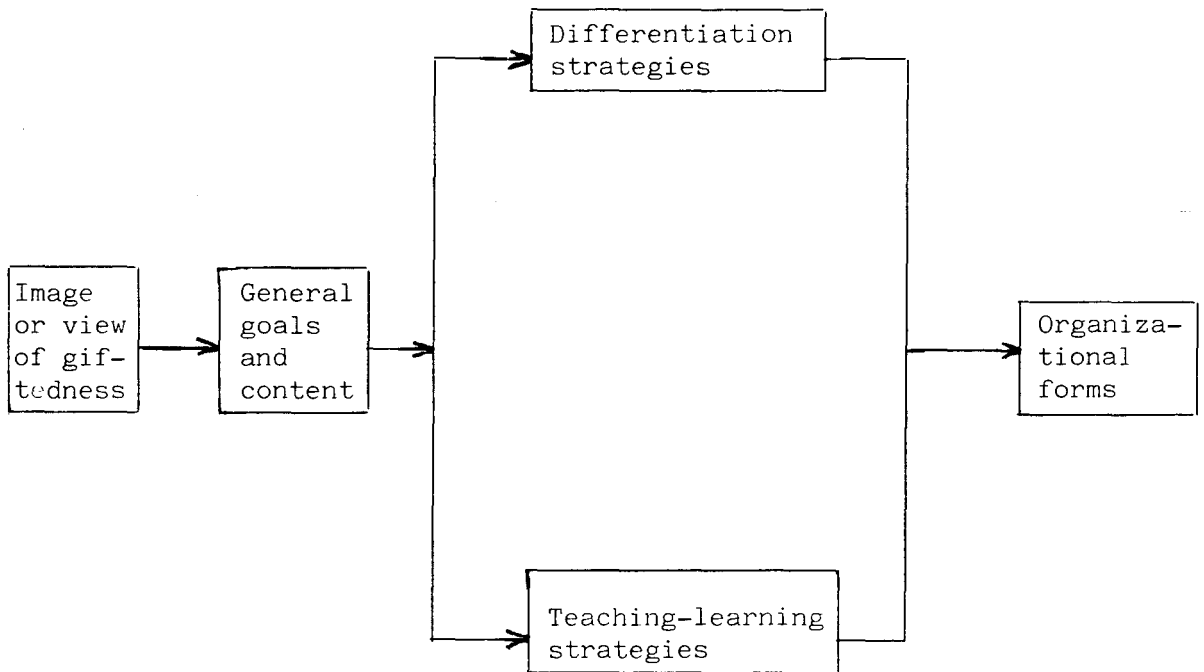


Figure 5.1 : Components underlying gifted child programmes

5.1.1 Image or view of giftedness

Taylor et al. (1983:68) point out that the image of giftedness or the way in which the term giftedness is defined will influence how the gifted child programme is structured. If giftedness is taken to mean an ability to achieve high marks in subjects, intellectual attainments may be emphasized. In contrast, if giftedness is defined in a wide sense as possessing superior abilities in the performing arts, in psychomotor performance, leadership, or creativity, or as having either general intellectual or specific academic abilities, a wide variety of learning experiences will need to be offered to accommodate all these abilities.

According to Maker (1982:3) a programme for gifted children should provide experiences that are "qualitatively different from the basic program provided for all children" and should "enhance or take into account what is special about these children." She states that gifted children exhibit behavioural differences in four areas: learning, motivation, creativity and leadership (ibid:7) and thus designs a programme for the gifted according to this view. Renzulli (1977:33-36) believes that no single criterion can be used to determine giftedness. Instead, he points out that people who have been regarded as gifted in society have possessed a cluster of three traits, viz. an above average level of intelligence, a high level of task commitment and creativity, and that these three traits interact to result in superior performance when brought to bear on certain problems. Consequently, in his view, pupils need to be taught various investigative and research techniques and should be allowed the freedom to select problems in areas of interest to them for investigative study.

Bell (1986:122) specifies that teachers should understand and accept a specific view of giftedness and use this view to plan, adjust and relate content to the learning styles, and abilities of the gifted child. Consequently the assumptions underlying gifted child programmes form the basis for decisions on what to include in and exclude from the programme.

5.1.2 General goals and content

Maker (1982:151) points out that the programme goals are the "overall statements of what the curriculum should or will accomplish." She

indicates that a gifted education programme may be modified according to content, process or method, product, and learning environment. Programme goals can therefore respond to these four general areas of curriculum modification. If the programme goal is to encourage gifted or talented pupils to become "an actual investigator of a real problem or topic by using appropriate methods of inquiry" (Renzulli, 1977:29), then a variety of general exploratory activities (or Type I activities), and group training activities enabling learners to develop the processes to deal more effectively with content, and assisting them to develop the skills of inquiry (Type II activities) will need to be offered in order that pupils may become "first hand inquirers" of problems which are real to them (Renzulli, 1977:6,25). If creativity or creative problem solving is the main goal of the programme then content will be selected to assist in the acquisition of processes encouraging and enhancing creativity. A programme which has as its goal intellectual attainments by pupils will focus on content to encourage pupils to master the learning content to the best of their ability. Thus, as Taylor et al. (1983:69) explain, the goals the programme wishes to attain consequently also influence the way it is to be structured.

5.1.3 Differentiation strategies

By differentiation is meant the steps taken to ensure that each gifted pupil learns according to his own specific learning needs, interests and abilities (Taylor, et al., 1983:70). The four strategies of differentiation are: acceleration, enrichment, individualization and grouping.

A gifted child programme may utilize the strategy of acceleration to differentiate between pupils in the gifted child programme and those in the regular classroom. This enables gifted pupils either to become acquainted with learning content at an earlier age than their peers or else to be accelerated through the standards to complete their schooling at an earlier age than is usual.

Enrichment activities provide learning experiences that replace, supplement or extend instruction beyond those of the regular curriculum - they include depth and breadth of understanding. Renzulli (1977:13-14) defines enrichment as "experiences or activities that are above and

beyond the so called 'regular curriculum.'" He points out that an important aspect of enrichment is that pupils are given the opportunity to pursue interests in a chosen area of study to the depth and extent they desire and in accordance with their preferred styles of learning. Thus enrichment activities should have, as the cornerstone, the interests of learners. However, he emphasizes that the pupil, himself, should have "an honest and sincere desire ... to pursue a particular topic or activity of his or her own choosing" (ibid:5,16).

The differentiation strategy of individualization is especially suitable for the gifted child in the regular classroom situation for whom no special programme has been provided. By utilizing individualized teaching the core curriculum may be modified and adapted to the gifted pupil's needs and interests. As Maker (1982:3) points out, if gifted children are considered different enough in the areas of learning, motivation, creativity and leadership, then they will need to be provided with content and processes which suit their specific learning requirements. Thus, through individualization, programmes may be developed to offer learning experiences which provide a challenge for gifted and talented pupils, especially as conventional teaching which is geared to meet the needs of the "average" pupil too often falls below the capabilities of the gifted child. Often they have already mastered the skills and concepts in the regular curriculum and thus require individualized learning activities where they can delve more deeply into their subject matter.

To facilitate access to special learning opportunities pupils may be grouped in various ways. Grouping may be heterogenous (pupils have different aptitudes and abilities) or homogeneous (grouped according to similar ages, academic progress and abilities). Pupils may be grouped together in magnet classes or according to specific academic abilities, or they may be pulled out from classrooms for additional instruction in specific subjects.

5.1.4 Teaching-learning strategies

Once the programme goals have been formulated, teaching-learning strategies or models need to be selected and evaluated to achieve these

goals (Maker,1982:154). These teaching-learning strategies are carefully conceived plans which have been designed to provide the differentiated programming required to meet the unique needs of the gifted.

Maker (1982:111-118) has identified a number of teaching strategies which may be utilized. A model that may be used to develop higher level thinking is that of Bloom's Cognitive Taxonomy which consists of six levels: knowledge, comprehension, application, analysis, synthesis and evaluation. This provides a set of criteria to classify educational objectives according to the level of complexity of the thinking which may be required. The affective domain is not neglected, as Krathwohl's Affective Taxonomy with its five levels of receiving or attending, responding, valuing, organization and characterization by a value process may be utilized as well. A teaching model especially effective in gifted child programmes is the Creative Problem Solving Model of Sidney J. Parnes which provides a structured method enabling pupils to approach problems in an imaginative way.

A model that has been designed specifically for teaching gifted children is Renzulli's Enrichment Triad Model. Provision is made for three types of enrichment:

- Type I Enrichment consists of a wide variety of experiences or activities designed to introduce pupils to topics or areas of study which are of potential interest;
- Type II Enrichment consists of methods, materials and instructional techniques or training exercises intended to develop thinking and feeling processes;
- Type III Enrichment consists of activities in which a pupil emulates a professional investigator in attacking a real problem or topic.

Among the other models that are described by Maker as being suitable for use in programmes for gifted pupils are J.P. Guilford's The Structure of the Intellect, Hilda Taba's Teaching Strategies Program and Frank E. Williams' Teaching Strategies for Thinking and Feeling (*ibid*:113, 118-121). She points out that these models may be used singly or else they may be combined to develop a programme that is appropriate for gifted children in a specific school.

According to Maker (1982:85-95) the classroom structure should also be modified. She believes that the learning environment for gifted pupils should be pupil-centered, not teacher-centered i.e. the pupils should talk more than the teacher and pupil involvement and group interaction should be fostered. Pupils should also be allowed to take an active, not a passive role in learning activities. Teachers should encourage pupil independence in the planning of learning and class activities and in classroom management as well, while the classroom atmosphere itself should be open instead of closed. This means that the learning environment can change if necessary to permit new ideas to enter, and planned situations can change since there is openness to the ideas of the pupils. Pupils, too, should be encouraged to avoid conformity. The classroom structure, furthermore, should be characterized by an accepting, not a judging attitude. Maker (ibid:96) defines acceptance as "the absence of judgement" or the "avoidance of value judgements." Teachers should accordingly attempt to understand the point of view of the gifted pupils, actively listen to what they have to say and encourage them to clarify or elaborate on their ideas. Emphasis should be placed on constructive criticism and evaluation, not on judgement. Additionally, the classroom structure should be characterized by complexity i.e. gifted pupils should carry out complex intellectual tasks in a complex physical environment (Maker, 1982:103). Renzulli (1977:59-60) points out that gifted pupils should have access to a number of reference books, for example, encyclopedias, atlases, catalogues, digests and anthologies, and non-book reference materials, for example, video tapes, filmstrips, globes, maps, records and charts. Pupils engaging in research activities should be given the opportunity, too, of using the community as a resource on a planned basis, by enabling them to gain access to, among others, hospitals, museums or clinics. Finally, Maker (1982:105-106) emphasizes the need for high mobility. The classroom structure should be flexible enough to allow pupils freedom of movement in and out of the classroom as well as within the classroom. There should be differing grouping arrangements both in and outside the classroom so that pupils are able to study with various subgroups and also alone, and pupils should have access to a variety of learning environments, materials and resources.

5.1.5 Organizational forms

Although there are a variety of organizational forms or methods which may be utilized in programmes for the gifted, a number of factors such as economic considerations, the availability of suitable personnel and local conditions may combine to determine to what extent these organizational approaches may be implemented (Taylor et al., 1983:99).

Among the organizational forms which may characterize gifted child programmes are resource centres where gifted pupils have the opportunity to work independently on projects, individualized instruction in which pupils learn at their own pace in accordance with their unique interests, abilities and needs, and independent study which gives pupils the opportunity to work on their own for stipulated periods in the school day. They are able, in conjunction with the teacher, to select the area of study in which they are interested and are allowed to engage in learning activities to the breadth and depth they require. An organizational form which gives gifted pupils the opportunity of becoming acquainted with more advanced learning content, or with learning content not offered in the regular school curriculum is that of correspondence courses. This organizational form may be suitable for pupils in rural schools which have little access to colleges, universities or other schools. Educational journeys, Saturday schools, and vacation schools offering special programmes for gifted pupils are other alternatives which may characterize gifted child provision. Within the school itself, magnet classes may be formed where gifted pupils are grouped together for the school day according to specific or general academic ability. Mentors from the community who have expertise in specific fields of study may be used, too, to aid gifted pupils who are engaged in special research activities (Taylor et al., 1983:100-109).

In order to accommodate various teaching-learning strategies the school organization will need to be flexible to enable gifted pupils to consult mentors or community resources during the school day or week, should the need arise. Differing grouping arrangements also require an organizational structure which is flexible. An inflexible school organization may inhibit pupils in their learning or research activities and may thus lead to the failure of a gifted child programme.

5.1.6 Assessment or evaluation procedures

Maker (1982:74-77) specifies that the product which has been developed by a gifted pupil should be appropriately evaluated. This evaluation should consist of teacher assessment, self-evaluation by the pupil and evaluation by a real audience. Renzulli (1977:30) explains that pupils engaged in investigating a problem in a chosen area of study should do so with a producer's rather than a consumer's attitude. This implies that pupils should use investigative techniques to solve problems which are real to them or to produce something new in a selected area of study. Since they emulate professional investigators the results of their research or investigation should be communicated to real audiences in a professional manner. Thus teachers have the responsibility of giving gifted pupils the opportunity to present or make their product known to a real audience which has knowledge of that product. For example, a literary work may be sent to literary journals, scientific investigations may be presented to scientific journals or to universities, or the results of an investigation into the problems of pollution may be made known to an environmental or ecological society. Pupils benefit by critical feedback from professionals in various fields of study; however, they need to be taught techniques of self-evaluation i.e. methods to assess the positive and negative aspects of their product in order to refine it before presenting it to a real audience.

5.1.7 Resources

Gifted child programmes require the availability of a wide variety of resources, both for content and for methodology, thus a well-equipped media and library centre should be available. According to Renzulli (1977:59-60) gifted pupils should have access to a number of reference books, for example, encyclopedias, atlases, catalogues and digests, and non-book reference materials, for example, video tapes, filmstrips, globes, maps, records and charts. The community may also be used as a resource on a planned basis, for example, by enabling gifted pupils to gain access to, among others, hospitals, museums, archives or universities. Bell (1986:123) emphasizes further that a variety of resources should be used and modified according to the level of development, the abilities and the interests of gifted pupils.

5.2 Conclusion

Once the fundamental components or elements of a gifted child programme have been identified the next step is to select an appropriate implementation strategy to enable users to put the programme into practice. The components which have been selected for the purpose of this study are: image of giftedness, goals and content, teaching strategies, resources, organizational structure and assessment or evaluation procedures. The task of the facilitator, then, is to provide the most suitable interventions in order to get the fundamental components into place. Since teachers are expected to use the programme, they require a supportive environment where assistance is provided on a day-to-day basis and where implementation problems may be solved as they may arise. Thus the possible role of a teacher as a facilitator at the classroom level will be investigated in the following chapter.

CHAPTER 6

THE ROLE OF THE TEACHER AS FACILITATOR OF A GIFTED EDUCATION PROGRAMME

When a gifted child programme is introduced into a school it is important that facilitators consider the position of those teachers who are required to use the programme. Teachers must find this programme meaningful and know how to proceed with implementing it if it is to be used successfully. If teachers experience too many difficulties when they put the programme into practice the likelihood exists that they may lose the inspiration and motivation to make any real contribution towards the implementation of it. If, in addition to this, an external co-ordinator or an internal facilitator is more concerned with administrative matters than with assisting the teachers, teachers may consider these co-ordinators and facilitators as being remote from the realities and day-to-day problems of the classroom. As a result, the systems of support and assistance which are being provided may appear inadequate to answer the teachers' needs and it thus becomes more difficult for them to resolve the problem of meaning. It may then be necessary for a second facilitator to assist teachers, one, moreover, who is able to gain easy access to classrooms and who may have experienced the difficulties of implementation himself. This change facilitator would need to have resource to a number of interventions on the micro- or classroom level to offer practical support and assistance to users of the gifted child programme. It is hypothesized that this second facilitator could possibly be an experienced teacher. Thus an attempt will be made to determine how valid this hypothesis is.

6.1 Conditions required for successful implementation

Teachers are impacted most by a new programme as they are the persons who have to put it into practice in their classrooms. As change is a personal matter, the concerns, frustration and perceptions that teachers experience may consequently contribute towards the success or failure of implementation. Thus, in the concerns-based approach (Hord et al., 1980:4) the concerns users may experience during implementation are identified to enable change facilitators to deliver the relevant supportive conditions and staff development activities to aid users to learn the new skills, techniques and attitudes they require to teach

gifted pupils. Assistance should be provided to help users change their performance. Consequently suitable interventions are employed to help and encourage users according to their needs. Interaction should be promoted for teachers to discuss the gifted child programme and their use of it, to share ideas with respect to materials, content and learning activities for gifted pupils, and to find solutions to possible implementation problems and difficulties in a collegial atmosphere. Effective channels of communication between facilitators and users should be established in order that users are able to gain clarification as to how they should implement the programme. Additional information with regard to gifted child education may also be relayed to users through these channels of communication. Thus Vandenberghe (1984:23) points out that "change in educational settings is possible and that teachers are prepared to engage in a change process if supportive conditions are created."

6.2 The Intervention Taxonomy

Interventions, which are actions designed to support users to facilitate their use of a new programme, are selected and utilized by change facilitators during the implementation process. These interventions, which have been classified hierarchically in an Intervention Taxonomy (Hall et al., 1984:285-288), will be utilized to identify which facilitative actions the teacher can employ at classroom level.

6.2.1 Policy

These are the broad rules or guidelines reflecting and directing decisions, and originate from an external source. They can be both official and unofficial. They initiate change, affect almost all individuals and are often in effect for years.

6.2.2 Game Plan

A game plan is an overall plan to facilitate implementation. It affects all individuals taking part and extends during the duration of implementation. The game plan consists of the following components:

- Developing supportive organizational arrangements: This includes planning, allocating funds for the implementation effort, provision of materials and resources, helping users to restructure roles, hiring

personnel and making decisions. Arrangements need to be made to ensure flexibility of the organizational structure in the school and classroom, suitable teaching-learning activities need to be planned and materials and resources made available;

- Training: Positive attitudes have to be developed, new skills, knowledge and attitudes taught and refined through planned training activities, for example inservice training, workshops, observation or demonstrations at universities, colleges, teachers' centres or schools;
- Providing consultation and reinforcement: These are activities targeted at specific users to encourage use of the programme and to solve difficulties and problems which may be encountered;
- Monitoring and evaluation: These are the actions taken to collect, analyze and report data about implementation and the outcomes. Questionnaires, assessment of concerns and use of the innovation or configuration of the innovation may be utilized;
- External communication: This involves the actions taken to describe to school advisers, external co-ordinators at teachers' centres, other schools and parents what is being done. Newsletters may be sent to other schools or to teachers' centres on the progress of the gifted child programme or samples of the work of gifted pupils can be made available. An outside audience may also be invited to attend lectures/presentations by groups of gifted pupils;
- Dissemination: These are actions taken to broadcast information about gifted child education to potential users to encourage them to adopt a gifted child programme. Circulars may be sent to schools to describe gifted child programmes or films may be made available demonstrating use of a gifted child programme.

6.2.3 Strategy

Strategies translate the game components which have been described into actions to accomplish specific objectives. Examples of strategies are ongoing training or coaching sessions.

6.2.4 Tactics

Tactics are a series of small day-to-day actions which are taken intentionally to assist users. They could take an hour or a day, for example, a day workshop, a number of short meetings with a group of users, or an afternoon spent demonstrating specific skills, such as the teaching of high level thinking skills, and coaching teachers in their use.

6.2.5 Incident

This is the smallest sized intervention and is a single action. A number of these actions may aggregate into tactics. Incident interventions are the building blocks around which other interventions may be built. Among incident interventions are suggestions made by a facilitator with regard to use of materials or brief visits to classrooms.

6.3 Possible interventions a teacher may employ to facilitate use of a gifted education programme

When teaching gifted pupils the role of a teacher changes in that he now becomes a manager of learning i.e. he does not assume the traditional role of instructor but passes the responsibility for learning and investigating on to the pupils (Renzulli, 1977:61). This entails changes in teachers' conceptions about teaching and their view of how pupils learn. Moreover, use is now made of new or revised materials and resources, while the grouping of pupils in and outside the classroom may also change to ensure high mobility. Teachers no longer have the security of the traditional classroom situation when teaching gifted children. Thus, to enable them to make this change in their conceptions and methods of teaching, systems of support and assistance are set up by facilitators who utilize suitable interventions. It is especially at the classroom level that users require assistance. A teacher, as was described in Chapter 4, is more likely to gain access to classrooms than do principals or other facilitators, consequently he is in a more viable position to interact informally with his colleagues. Since this interaction occurs at the micro-level it is hypothesized that if a teacher assists in facilitation the interventions he is most likely to employ will be the tactic and incident interventions, the brief day-to-day interventions that occur on this level. In order to determine which interventions teachers can employ to facilitate the implementation

of a gifted education programme a two-dimensional matrix will be used for each implementation phase and interventions plotted on to the basic components of the programme.

6.3.1 Mobilisation/adoption

The two-dimensional matrix which is used as a framework to describe the facilitative role of a teacher in the mobilisation/adoption phase is shown in figure 1. Cells in the matrix which generate possible interventions a teacher may employ are marked.

Elements of gifted child programmes Interventions	Image	Goals and content	Teaching strategies	Resources	Organizational structure	Assessment or evaluation procedures
Developing supportive organizational arrangements		✓	✓	✓	✓	
Training			✓			
Consultation and reinforcement (coaching)			✓	✓	✓	
Monitoring and evaluating						
External communication						
Dissemination	✓	✓	✓	✓		

Figure 6.1 : Possible interventions by a teacher during the mobilisation/adoption phase

Developing supportive organizational arrangements: According to Loucks and Hall (1979:7) teachers experience primarily informational and personal concerns when they begin using a new programme. Once a school has adopted a gifted child programme teachers desire information about gifted child education, and how they are to use a gifted child programme. They are also concerned with how it will affect them personally and what role they will be expected to assume when teaching gifted children. During the mobilisation/adoption phase teachers are preparing to use the new programme, consequently it is suggested that a teacher-facilitator may assist in the generation of internal support by conversing with his colleagues about what the gifted programme wishes to achieve and clearly defining what the aims and objectives of the gifted programme are. He can describe the programme, indicate which role changes have to be made and describe plans for informal coaching activities. This can occur in an informal question-and-answer group to attempt to resolve informational and personal concerns. Furthermore, suggestions on how teachers may restructure their role may be put forward. Teaching/learning activities may be planned. For example, a teacher-facilitator can make his colleagues aware that content in their subjects may have to be modified to fit the learning needs of gifted pupils, and he can explain, during very brief, informal meetings, how it is possible to modify learning matter to make it more complex or more varied. Questions, too, may be asked about the resources which are available for use in the gifted child programme, for example, whether a media centre or library has sufficient resources for initial use of a programme. Relevant materials and resources need to be available to establish use of the programme. Explanations may be made with regard to possible grouping of the gifted pupils and whether they will be pulled out of classrooms for specific learning activities, and an elucidation given of how the classroom structure should change so that it becomes more pupil-centred.

Training: While teachers are in the process of adopting a gifted child programme they may experience feelings of resistance and opposition to the establishment of a special programme for gifted pupils because of possible work overload. They may also have negative feelings about gifted pupils and gifted child provision in general. There may be opposition, as well, to the idea of changing their convictions about

teaching and to restructuring their teaching roles. Because he is able to interact informally with his peers, the teacher-facilitator may develop preparatory training activities to develop positive attitudes, to convey knowledge of how teaching roles will change and to help teachers overcome possible negative feelings and resistance towards using a gifted child programme.

Consultation and reinforcement: Since teachers are still preparing to use a gifted programme in the mobilisation/adoption phase the teacher-facilitator may engage in various actions to encourage use of the programme. He can assist in solving problems, for example time and management problems that may arise as teachers prepare to use the programme, and he can organize peer support groups and problem-solving groups. Within these groups he can describe teaching strategies that may be utilized by teachers and indicate how teaching strategies may be modified or adapted to suit the needs of the pupils who have been selected to participate in the programme. Suitable materials and resources may be developed, and plans made with regard to possible use of the community as a resource. Descriptions may also be given to enable teachers to restructure their classroom so that it becomes more pupil-centred and to enable teachers to become managers of learning.

Dissemination: Through informal interaction with his colleagues, a teacher facilitator may utilize various actions to encourage them to adopt a gifted child programme. This may be done by making prospective users aware of the new programme and by providing them with clear, detailed information about gifted children. He can also model or demonstrate use of the programme. By utilizing informal meetings during the day, brief conversations and books or videos he may clarify the view of giftedness underlying the programme and elucidate the programme goals and teaching/learning strategies which may then be selected to achieve the goals. Furthermore, he may disseminate samples of the work of gifted pupils from other schools to make users aware of what may be achieved if they adopt the programme.

6.3.2 Teacher Use

During the phase of teacher use teachers are expected to put a gifted

child programme into practice in their classrooms. Many teachers may possibly experience personal and management concerns during this phase as they may be uncertain about their new role as managers of learning, or uncertain whether they will be able to meet the demands placed on them by the programme and whether they are using the programme correctly. It is likely that they may be using the programme in a poorly co-ordinated or mechanical manner as well. Thus, by intervening in the classroom the teacher as facilitator may target interventions directly at individual teachers as the need arises. The two-dimensional matrix which is used as a framework to describe the facilitative role of a teacher in the phase of teacher use is shown in figure 6.2.

Elements of gifted child programmes Interventions	Image	Goals and content	Teaching strategies	Resources	Organizational structure	Assessment or evaluation procedures
Developing supportive organizational arrangements		✓	✓	✓	✓	
Training		✓	✓	✓	✓	✓
Consultation and reinforcement (coaching)		✓	✓	✓	✓	✓
Monitoring and evaluating		✓	✓	✓	✓	✓
External communication						✓
Dissemination						✓

Figure 6.2 : Possible interventions by a teacher during the phase of teacher use

Developing supportive organizational arrangements: A teacher-facilitator may develop supportive arrangements by assisting his colleagues to plan and set up relevant learning activities for the gifted pupils participating in the programme, or he may assist in modifying the content of subjects so that it is possible to realize the goals of the gifted programme. Necessary materials and resources should be available to establish use of the programme, thus a teacher-facilitator can ensure that these are obtainable and ready for use. Decisions, too, will need to be taken with regard to how gifted pupils are to be grouped, whether they will remain in the regular classroom, pulled out of the classroom or whether they will be together for specific classes. It is possible that a teacher-facilitator may assist with the planning and scheduling of these issues as he is aware of difficulties and problems his colleagues may encounter when changing the classroom structure.

Training: Actions to develop positive attitudes and to develop the knowledge and skills to use the gifted child programme are undertaken through formal organized training activities. These activities are structured and preplanned and are supplied by external co-ordinators, facilitators at universities, teachers' centres or other schools. However, a teacher-facilitator may intervene by assisting his fellow-teachers to select and use suitable teaching-learning activities to suit the interests, needs and abilities of the pupils in the programme and to realize the goals of the programme. He can explain how to structure the classroom to suit the learning requirements of the gifted pupils and he can demonstrate use of materials and resources and train teachers in their use. He may also supply brief training sessions before or after school in the form of workshops, for example, to consolidate what users have learnt during the general training activities. Evaluation procedures may then be explained, too, and teachers trained in their use in order to evaluate the product of the gifted pupils.

Consultation and reinforcement: These are actions taken to aid and encourage teachers to solve problems they may be experiencing as they use the programme. These interventions are targeted at individual teachers or at small groups of teachers and are informal and brief. They may take the form of short visits to classrooms to ask how colleagues are coping and to give aid in time and management issues, for example enquiring

whether the time allotted to learning activities is sufficient. Teachers may then be able, during the course of conversation, to make their concerns known with regard to, for example, classroom flexibility. Necessary equipment, for example, videos or slide projectors, may also be set up in classrooms or in the library, and their use demonstrated and explained, if required. Emphasis is placed on informal coaching activities, thus a teacher-facilitator may coach users how to ask open ended questions, or how to modify the learning content of the regular curriculum so that it becomes more complex, abstract and varied to suit the differing learning needs of the gifted. Afternoon meetings may be conducted to demonstrate thinking skills and to coach teachers in their use, for example how to teach the gifted the skills to become critical thinkers. Brainstorming and creative problem-solving activities may be practised, or activities to teach creativity described, while users may be made acquainted with and coached in the use of various simulation games suitable for use in gifted child programmes. The aim of these coaching activities is to enable teachers to progress from a mechanical use of the gifted programme to a more routine level where there is a more established pattern of use.

A teacher as facilitator may reinforce use of a programme through brief conversations or short problem-solving meetings, to aid in promoting interaction among users, thus allowing them to share ideas about learning activities, materials and resources, and enabling them to present solutions to implementation problems and difficulties which may arise.

Monitoring and evaluating: Short visitations to classrooms may occur, enabling a teacher-facilitator to offer support, encouragement and constructive criticism and to monitor use of a gifted programme. Accordingly, he is enabled to report and give feedback to an internal facilitator, for example a principal, or to an external co-ordinator whether the teaching strategies which have been selected are relevant to the goals of the programme, or whether they are activities which merely keep the pupils busy. He can monitor use of resources to ascertain their suitability or to ascertain whether additional materials may have to be developed. He may also monitor the flexibility of the classroom structure, for example, if pupils experience difficulty in their mobility in and outside the classroom. Assistance may be given, furthermore, to

teachers as they evaluate the research or investigative activities the gifted pupils are engaged in, or the product they deliver.

External communication: Samples of work of the gifted pupils may be shown to parents, external co-ordinators or to principals and teachers in other schools to communicate to others what the results of the programme are. A teacher-facilitator may function in an organizational capacity by arranging for an outside audience to attend demonstrations or lectures by a gifted pupil/group of gifted pupils or he may ensure that their product is sent to a university, society, literary or scientific journal for evaluation.

Dissemination: A teacher-facilitator may compile a newsletter or a circular to be sent to schools which have not yet adopted a gifted child programme to disseminate information and to encourage use. Samples of the work of gifted pupils may also be sent as examples of what can be accomplished if a programme is used in a school.

These interventions, which are all tactic and incident interventions, are personal, spontaneous and informal and are mostly of short duration, but nevertheless may contribute towards providing a supportive environment. The emphasis is on individualized day-to-day coaching in classrooms, brief meetings and problem-solving sessions, Conversations, suggestions and visits to classrooms may aid in encouraging use of a programme, and may help to develop commitment to a programme. Additionally, a teacher as facilitator may establish channels of communication between teachers, other internal facilitators, for example a principal, and external co-ordinators. Although these actions are all small they may complement the actions taken by other change facilitators, enabling them to build their strategy or tactic interventions around these incident interventions.

Hord et al. (1984: 1-2) subsequently ascertained that if a second change facilitator (assumed for the purpose of this study to be a teacher-facilitator) was active in an implementation effort the interventions he usually targeted towards users were the simple incident interventions. Thus this offers some confirmation to the hypothesis that a teacher may assist in facilitating use of a gifted education programme,

provided that he has had prior experience of the innovation.

6.3.3 Institutionalization

In this phase, as was described in Chapter 2, decisions are made to incorporate an innovation into the school so that it becomes routinized. According to Fullan (1982: 76-72) among the threats to institutionalization are lack of staff support and lack of interest, while Berman (Lehming, et al., 1978:274) points out that it is important for users to assimilate what they have learnt during implementation, thus helping to ensure that the innovation becomes part of the routine and organizational structure. However, Loucks et al. (1979:24) state that an innovation cannot be said to be 'institutionalized' if teachers are not at the 'Routine' level of use or above. Their informational, personal and management concerns should also be relatively low. The two-dimensional matrix which is used as a framework to describe the facilitative role of a teacher in the institutionalization phase is shown in figure 6.3.

Elements of gifted child programmes Interventions	Image	Goals and content	Teaching strategies	Resources	Organizational structure	Assessment or evaluation procedures
Developing supportive organizational arrangements						
Training			✓			
Consultation and reinforcement (coaching)			✓	✓		
Monitoring and evaluating			✓	✓		
External communication						✓
Dissemination						✓

Figure 6.3 : Possible interventions by a teacher during the phase of institutionalization

Training: Continuing short training sessions and visits to classrooms may be undertaken by the teacher-facilitator to consolidate use of teaching strategies selected for the programme.

Consultation and reinforcement: Interventions may be targeted at users to ensure that they continue to receive support and encouragement so that they retain the interest to continue with the programme. A teacher-facilitator can ensure that materials and resources are always available, that teachers are using the most appropriate teaching strategies to achieve the programme goals and that teachers are updated with the latest information on new teaching-models and on gifted children. Thus he assists in focusing teachers' concerns on the impact the programme is having on participating pupils and aids teachers to use the programme on a 'Routine' or possibly a 'Refinement' level.

Monitoring and evaluating: Conversations with teachers and with pupils participating in the programme may assist a teacher-facilitator to evaluate the extent to which the programme has become a routinized part of the school. He can thus provide feedback to the principal or to an external co-ordinator. However, the principal, as the leader of the school, contends with problems such as lack of funds, threats of staff turnover and a lack of clearcut organizational change.

External communication: As in the phase of teacher use a teacher-facilitator may continue to communicate to parents, pupils or members of the community what is being accomplished by gifted pupils, by arranging exhibitions, presentations or demonstrations of the product of gifted pupils, so that an audience other than the teacher may evaluate the product.

Dissemination: A teacher-facilitator may continue broadcasting information about his school's programme for gifted pupils to external co-ordinators and to teachers at other schools by means of newsletters describing the programme or by making samples of the work of gifted pupils available to those interested in adopting a programme.

6.4 Possible roles a teacher-facilitator may assume

With reference to the intervention activities explained in 6.3 it is suggested that a teacher-facilitator may possibly assume the following roles:

- Coach/Trainer: Teacher facilitators may arrange short coaching sessions at a school or at a teachers' centre to demonstrate the use of skills to be acquired or materials to be utilized. He may provide opportunities where these skills may be practised in informal and supportive settings to promote teacher confidence in using a gifted child programme. New teaching roles and behaviour may be clarified, too. Emphasis is placed on informal training. It may be possible, too, to assist teachers to develop or adapt materials, for example, for creative problem-solving activities, to promote the exchange of ideas about learning activities and to aid in the application of materials. Familiarity with materials and resources is more likely to promote a positive attitude towards teaching gifted pupils;
- Consultant and supporter: A teacher-facilitator may assume a supportive role as teachers begin putting a gifted child programme into practice by assisting them to adapt and modify learning content to meet the varying learning requirements of gifted pupils, and to aid them in developing and using the most relevant learning materials and resources;
- Liaison agent: A teacher as facilitator may function as the link between teachers/users, principals or other internal facilitators and external co-ordinators, keeping them informed about the progress of implementation, relaying information to teachers and assisting them to interpret or adapt the information, and expressing teachers' concerns to other internal facilitators;
- Foster interaction: Because he is in constant daily contact with teachers who are using a gifted child programme a teacher-facilitator is in a position to foster inter-personal relationships and to arrange informal meetings in which problems are put into perspective, thereby helping to promote interaction and stimulate use;

- Problem-solver: A teacher facilitator may arrange short, informal problem-solving sessions to concentrate specifically on the day-to-day problems and difficulties teachers may experience when they begin changing their teaching role and making use of the new teaching strategies.

By assuming these roles a teacher-facilitator may assist in promoting a supportive environment which may aid in alleviating teachers' concerns and increasing their level of use of a gifted child programme.

6.5 The influence of the principal's change facilitative style

The interventions which a teacher-facilitator can employ may be limited by the place he occupies in the structure of the school, since the extent to which he may provide assistance will probably be influenced by the role the principal assumes during a change effort. According to the findings of researchers such as Hall et al. (1983), Hord et al. (1984) and Huling-Austin et al. (1985), among others, the principal, as the formal leader of the school, is the key to educational change in a school in that he creates the structure enabling change to occur. Without his sanction it is unlikely that a gifted child programme will be successfully implemented. In their research, Huling-Austin et al. (1985:31) collected data indicating that change can occur without the principal's assistance, but that there must be some principal sanction. However, the fact that principals appear to differ in the extent to which they facilitate change or allow others within the school to assume a facilitative role has implications for the possible facilitative role a teacher may be able to assume. In their analysis of principal change facilitative style Hall et al. (1983:24) give the following brief explanation:

- Initiators make it happen
- Managers help it happen
- Responders let it happen

Consequently, these change facilitative styles may have the following possible influence on interventions by teacher-facilitators (Hord et al., 1983:21-23):

- Initiators: Principals who are initiators seize the lead and make things happen. Thus if a teacher assumes a role as facilitator he may be limited to employing incident interventions to complement the interventions that the principal may provide;
- Managers: Principals exhibiting this change facilitative style may employ many interventions. This implies that a second change facilitator will make the fewest number of interventions thus leading to the assumption that a teacher may not have much opportunity of assuming a facilitative role;
- Responders: Principals with this change facilitative style appear to make the lowest number of interventions, thus necessitating the aid of a second change facilitator (or a teacher-facilitator) who employs both incident and tactic interventions. Since responders appear to be more concerned with administrative matters teachers may possibly be granted more autonomy than usual, which seems to imply that a teacher may assume the role of facilitator by being permitted to target interventions, at the classroom level, at his colleagues.

6.6 Conclusion

It appears that in order to facilitate use of a gifted education programme a teacher would need to be granted some degree of autonomy. Principals who are initiators appear to grant a great deal of autonomy, whereas managers wish to do everything themselves. Consequently the degree to which a teacher may facilitate change will be largely influenced by the role the principal assumes during the change process. This facilitative role also appears to be limited mainly to the phase of teacher use during micro-implementation where he can foster interaction among users of a gifted child programme since he is in daily contact with them, assist in alleviating concerns and solving day-to-day problems, provide informal coaching and ensure that there is a supportive environment in which implementation can occur. Therefore, according to Hord et al. (1983:27) "the role of ... a teacher interpreter/representative/model for the school within the facilitation process appears to be an important one."

CHAPTER 7

CONCLUSIONS OF STUDY

Teaching gifted pupils places heavy demands on teachers. This, together with a probably already heavy workload and the fact that their traditional teaching role must change to enable them to become facilitators of learning and gradually allow gifted pupils to assume partial, if not full, responsibility for their own learning, makes the process of implementing a gifted child programme more difficult. If the principal is not supportive, or if he is more concerned with administrative matters in his school the environment for successful implementation will not be favourable. Without the support and assistance of someone conversant with the various aspects of education for the gifted, teachers may lack the motivation to persevere with their efforts to use the programme or to develop commitment to it. However, it would appear that a teacher representative who interacts informally with his colleagues as they use a programme, and who has knowledge about gifted pupils and their differing learning needs, and the difficulties teachers may encounter when they are expected to teach these pupils may be able to facilitate use of a programme. It is possible that this may be done through use of suitable interventions of an interactive nature which are targeted at teachers putting the gifted education programme into practice.

7.1 Inferences

1. The role of teacher-facilitator is not a well-defined one. Research data from the literature also indicates that there is little formal recognition for this role.
2. A teacher experienced in the change to be implemented may either be appointed by a principal to assist in implementing a gifted child programme or else he may voluntarily or involuntarily assume the role because of prior experience in teaching gifted pupils or because his colleagues judge his teaching practices as successful and effective.
3. When teachers are involved in teaching gifted pupils they need to abandon the view of themselves as being the ultimate

source of authority in the classroom and are instead called upon to assume the role of manager of learning. A corresponding change is thus required in their teaching strategies, the conceptions they have about teaching and the materials they have to use. This change in role and attitude can be difficult. This change in the traditional teaching situation may result in feelings of anxiety and concern on the part of teachers as to whether they will be able to achieve the objectives underlying a gifted child programme. Teachers therefore require sympathetic assistance and support, clear practical guidelines, and a teaching programme that can be translatable into practice, as they do not always have the security of textbooks or of the traditional teaching methods and materials normally associated with the regular classroom situation.

4. Because gifted children usually wish to learn in accordance with their own interests and styles of learning and wish to pursue their learning and investigative activities independently it is essential that the school structure and grouping of pupils be flexible to accommodate these varying learning needs and styles. A classroom teacher needs to have access to a variety of teaching methods and materials and may even rely on the community as resource. Thus there should be interaction among teachers to exchange ideas, modify or adapt materials and discuss difficulties encountered during implementation. They should also be encouraged to talk about their successes or their concerns in group problem-solving sessions.

5. In order to develop commitment towards education for the gifted, teachers should be actively involved in activities where they learn through participation. This can occur when suitable informal training and coaching activities are provided in a supportive environment.

6. A teacher-facilitator may interact informally with his colleagues and target incident interventions at the classroom level to provide a supportive environment in which teachers are enabled to use a programme in such a way that they are able to modify and adapt it to suit the needs of individual pupils participating in the programme.
7. Because he is able to gain access to classrooms more easily than a principal or a vice-principal, a teacher-facilitator may interact more informally with his colleagues on a day-to-day basis. Consequently he is immediately available should users encounter implementation problems or difficulties. Thus it appears that the role of teacher-facilitator is a viable one at the level of the classroom.

7.2 Problems associated with the role of the teacher as facilitator

1. A problem that the teacher-facilitator may encounter is that teachers may possibly feel some resistance to the provision of special learning activities for gifted pupils, above and beyond those of the regular curriculum. They may also exhibit a negative attitude to the idea of special education for the gifted, especially if they feel that these programmes may lead to elitism.
2. If the organizational structure is inflexible it may be difficult to make provision for enrichment activities or research activities for gifted pupils, thus causing a programme to fail.
3. If a principal is opposed to making provision for gifted pupils in his school because he regards the regular curriculum as being adequate for all pupils, a teacher is not likely to achieve any degree of success as facilitator with regard to implementation.

4. Despite the fact that he may have had prior experience in teaching gifted pupils, the teacher who fulfils the role of facilitator is also a classroom teacher with perhaps little or inadequate training in implementing a new programme. Consequently, he may also have concerns, and needs to be provided with the skills necessary to assist his peers.
5. A teacher assuming the role of facilitator will need to have clarity about the roles he is called upon to assume and about the interventions he will be required to make to provide a supportive environment for his colleagues.

7.3 Implications of the study

Since the role of teacher-facilitator is not clearly defined it may cause lack of clarity as to the extent that teachers may offer assistance to their colleagues. Consequently teachers who assume a facilitative role need assistance, themselves, when helping users put a gifted child programme into practice. As a result training should be arranged for those teachers who have been assigned the task of helping users or who have assumed the role of facilitator. These training sessions could occur at teachers' centres, other training centres or even at universities under the guidance of gifted education coordinators and/or academics who have made a study of gifted child education and of the problems of implementation. This should occur in conjunction with a Department of Education. Interaction among possible teacher-facilitators and with coordinators at teachers' centres should also be encouraged in order to discuss problems that may have been experienced with regard to the implementation process and to set a norm with regard to how a gifted child programme may be implemented. This ensures that a programme is not implemented haphazardly.

7.4 Conclusion

In this study it appears that the role of teacher-facilitator is directly influenced by the role the principal assumes when implementing a new programme. It also appears that the most likely phase in which a teacher may facilitate the implementation of a gifted child programme is during that of teacher use. However, there is little formal training for this role which appears to be limited mainly to the provision of incident

interventions at the classroom level. Despite this, these incident interventions can function as building blocks around which the other internal and external change facilitators/coordinators can build their training activities, thereby enabling teachers to discover that the "process of becoming a teacher of gifted children is indeed an exciting and rewarding adventure" (Torrance, 1965:92).

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