

two directions.

1.2.1.1 Research question (1): How can CAS be implemented in all public secondary schools, District C1, Gauteng?

Public schools refer to those schools that are largely funded, controlled and administered by the state and are concerned with mass education countrywide. District C1 comprises of 158 public schools including 38 secondary (standards 6 to 10) schools that were formerly under the jurisdiction of various apartheid era departments of education and located in the former racially divided group areas of Ennerdale, Lenasia, parts of Soweto and Johannesburg South. (Daya 1997 :1) CAS could conceivably be implemented initially in 10 selected secondary schools in District C1, Gauteng followed by the other 28 secondary schools within a period of three years.

The recent curriculum restructuring programme of the state has opened opportunities for innovative programmes to be included in the public school curriculum. Because CAS, as an activities-based programme, holds possibilities to contribute to such curriculum reform, the ideal situation is that the programme be implemented across the nation's schools, perhaps beginning in a cluster of schools in a particular district and then spreading further afield.

1.2.1.2 Research question (2): How can CAS be implemented in a purpose-built private secondary school in Gauteng?

The term purpose-built here refers to the building of a school taking into account the special nature and activities of CAS. Private schools refer to schools that

in public schools and in a private school in Gauteng, thus contributing to the transformation of school curriculum here and to the nation building and youth development projects of the Reconstruction and Development Programme [RDP]. (ANC 1994a)

1.2 The research problem.

The problem considered in this study is: How can CAS be implemented in South African schools?

Implementation here refers to the process of 'putting into practice' (Fullan 1991:65), rather than simplistic insertion or installation, of an innovative programme, within a single school, a cluster of schools, or within a school system across the nation. The terms how can refer to particular strategies or ways of implementing CAS as an activities-based programme.

Broadly, the research problem has to do with a front-end analysis of policies and practices guiding the implementation of innovative programmes in complex educational systems. The concern here is linked to delivery rather than with a conceptual analysis or theoretical study of implementation. More specifically, the problem here is concerned with the implementation of a specific programme, CAS, in South African schools.

1.2.1 The research questions.

Implementation of CAS could proceed in two broad categories of schools in SA namely in 'public' and 'independent' or private schools as evidenced in recent legislation. (NDE 1996b: 13; SASA 1996: 10, 20) The research questions considered here are, thus, taken in

schooling, German educationist Kurt Hahn (1886-1974) established the first Outward Bound School in Aberdovey, South Wales in 1941. Outward Bound, an activities-based programme was the central and foundational programme in Hahn's school curriculum. Since then international organisations such as the United World College Council [UWCC] and the International Baccalaureate Organisation [IBO] founded on the educational ideas of Kurt Hahn and others, developed and implemented such programmes in Europe, Africa, the USA, Asia, and Australasia. Creativity-Action-Service, or CAS as it is often called, is one of these 130 programmes integral to which are: recognition and development of creativity in students; service to the community; developing understandings between peoples of difference, amongst other things. Activities here include environmental projects, research, care for others, and expeditions.

This indicates that CAS as an existing internationally developed and tried-and-tested programme may be usefully utilised in SA schools in this time of transition to both shift thinking about school curricula from content to activities and to develop competencies, attitudes, and values needed in building the nation.

The purpose of this study, thus, focuses on implementation (as opposed to evaluation). It seeks to ascertain how CAS can be implemented in SA schools. The study is premised on the not unreasonable belief that CAS is effective as programme, delivers on its aims in international contexts, and is likely to do so in SA schools too because of the international experience over 30 years.

I shall endeavour, from insights gained in this study, to pursue the implementation of CAS in two ways, namely

CHAPTER ONE: INTRODUCTION.

Broadly, this study investigates two ways in which a particular curriculum, namely Creativity-Action-Service [CAS], may be implemented in the curriculum in South African [SA] schools in an era of transformation to democracy, where the education system is being restructured in tandem with that change and where the school curriculum is opening up to break with its apartheid past. In this chapter I discuss the (1) purpose and rationale of the study and (2) the research problem.

1.1 Purpose and rationale of the study.

The purpose of this study is to undertake a front-end analysis for the implementation of CAS in schools in SA. Two considerations underpin the study. One, school curricula are, and have been in the main content-focused emphasising academic ability at the cost of other abilities that schools may develop. The literature suggests that schools should recognise and develop a range of other abilities here for example for the future reconstruction and development of the country. To this end the school curriculum should also include activities-based programmes which combine creativity, action and service as learning to complement essential academic programmes of instruction.

The second consideration is that tried-and-tested activities-based curricula developed abroad exist and which arguably can be used in SA to contribute to the process of transformation in terms of abilities, attitudes and values in keeping with the ethos of democracy and reconciliation. Recognising the need to address limitations in mainstream content-focused

MIS	Manila International School*
NDE	National Department of Education
NEPA	National Education Policy Act
NEPI	National Education Policy Investigation
NETF	National Education and Training Forum
NGO	Non-governmental organisation
NPGEA	National Policy for General Education Affairs
OSI	Ort-Step Institute
PBPSS(G)	Purpose-built private secondary school, Gauteng
PEUP	Primary Education Upgrade Programme
PS	Problem-Solving
PS/CF	Problem-Solving / Critical Factor
PSP	Primary Science Programme
RD &D	Research, Development and Diffusion
RDP	Reconstruction and Development Programme
SA	South Africa
SAFCERT	South African Certification Council
SAIR	South African Institute of Race Relations
SASA	South African Schools Act
SEA	School Education Act
SI	Social Interaction
SWC	Swaziland World College
TED	Transvaal Education Department
UWCC	United World College Council
YP	Youth Preparedness
*	= fictitious names

LIST OF ABBREVIATIONS

ANC	African National Congress
APSS DC1(G)	All public secondary schools, District C1, Gauteng
CAS	Creativity-Action Service
CAS PBPSS(G)	A PBPSS (G) in which CAS is implemented as a foundational programme
CIG	CAS Interest Group
CRSA	Constitution of the Republic of South Africa
CS	College-School
CSup	CAS Supervisor
DD	District Director
DET	Department of Education and Training
DNE	Department of National Education
DT	Design Technology
GBHS	Gauteng Boys' High School*
GDE	Gauteng Department of Education
GICD	Gauteng Institute of Curriculum Development
HOA	House of Assembly
HOD	House of Delegates
IB	International Baccalaureate
IBO	International Baccalareate Organisation
INSET	In-service education and training for teachers
JIS	Johannesburg International School*
LBPCP	Lester B Pearson College of the Pacific
MA &D	Mutual Adaptation and Development
MEC	Member of the Executive Committee
MU'MIN	Mu'min Girls High School*
MIPS	Mu'min Primary School*

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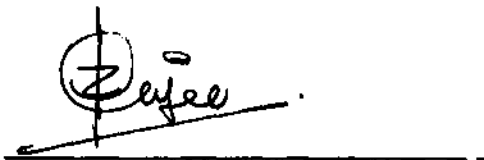
All the key persons and their institutions, both local and global, who gave their time to take part in this study.

My family, who remained patient and supportive.

DECLARATION

I declare that this research report is my own, unaided work. It is being submitted in partial fulfilment of the requirements for the degree of Master of Education at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other university.

Signed:

A handwritten signature in cursive script, appearing to read 'Zeinoul Abedien Cajee', is written over a horizontal line. The signature is written in dark ink and is somewhat stylized.

ZEINOUL ABEDIEN CAJEE

30 April, 1997.

ABSTRACT

As a front-end analysis, the present study seeks to investigate two ways in which Creativity-Action-Service [CAS], an activities-based experiential learning programme, can be implemented alongside the overly content-focused curriculum in South African schools in an era of transformation to democracy and as a means of contributing to nation building. Two research questions which relate to two possibilities for the implementation of CAS in Gauteng schools are investigated: (1) How can CAS be implemented in all public secondary schools in District C1, Gauteng? and (2) How can CAS be implemented in a single purpose-built private secondary school? The research design adopted is largely descriptive in nature and the methodology includes gleaning data from disparate sources including key informants and recent state policy documents. From the data it is argued that that CAS can be implemented in response to the first question by means of a combined top-down bottom-up curriculum implementation strategy, namely, Mutual Adaptation and Development, and, in the case of the second question, by means of the Problem Solving/Critical Factor strategy which is driven by the identification of felt needs.

**THE IMPLEMENTATION OF CREATIVITY-ACTION-SERVICE IN SOUTH
AFRICAN SCHOOLS**

ZEINOUL ABEDIEN CAJEE

**A Research Report submitted to the Faculty of Education,
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implementation and points to specific administrative and legal procedures. Finally, CAS is an internationally recognised and tried-and-tested activities-based programme and can potentially develop abilities other than academic abilities in schools to enable students to play meaningful roles in society.

Hahn implemented his activities-based programme referred to as Outward Bound in the first Outward Bound School in Aberdovey, UK, in 1941. (Schulze 1972: 7) Since then several other schools were founded based on the philosophy and educational principles propounded by Hahn by the UWCC in all parts of the world including Wales, Singapore, Swaziland, and Canada. (Linden 1983: 9). Moreover, the programme was picked up and further developed as CAS by the IBO in the 1960's as a compulsory 'fundamental programme' for the International Baccalaureate (IB) diploma award. CAS has been implemented internationally across 75 countries in 553 IBO affiliated schools, both in private and state school systems alongside the academic curriculum. (IBO 1992: 1; IBO 1994: 11; See Appendix C for details of IBO and the IB Diploma award)

The IBO usually has stringent requirements for affiliation including policies of non-racism and the promotion of international understanding amongst the national, cultural and religious diversity of the international community. These requirements are consistent with the current ethos of SA, unlike in the apartheid era. However, interest here is in the implementation of CAS rather than the IB Diploma and it will be the prerogative of SA schools to implement the programme if they so wish without necessarily affiliating to IBO. (IBO undated (b): 1)

In summary, the literature review indicates the variety of change strategies and the notion of implementation as a complex process rather than a one-off event as supported by studies on implementation of innovations. The review also indicates how state policy affects

The process model (Appendix A) promotes the notion of learning through the engagement in activities rather than through memorisation and regurgitation as in the dominant content-focused traditional model. The literature suggests that the process-model is the preferred model in cases where the focus is on learning through engagement in activities (Stenhouse 1975) and may therefore be useful in understanding and further developing CAS as an activities-based programme.

What follows is a brief review of CAS, the World College and IBO movements.

2.5 CAS, the World College and IBO movements.

CAS is the acronym for Creativity-Action-Service. A critical analysis of CAS as programme (Appendix B) suggests strong process model characteristics because learning in CAS is not content-based but rather activities-based where activities are selected on the basis of criteria and principles rather than behavioural ends. The design also has implications for the pedagogy and assessment of students.

Elements of CAS were originally conceived in the Outward Bound programme by German educationist Kurt Hahn who, according to Schulze (1972: 5-7), felt that the prevailing information transmission mode of learning was inadequately preparing youth for responsible roles in society and ignoring inter alia the development of strength of character, leadership, values of understanding and compassion in students. Hahn focused his attention on a variety of activities including expeditions and wilderness survival as learning to promote the personal, social and spiritual development of youth.

apartheid laws and policies are being repealed and being replaced by policies consistent with transformation and the democratic ethos prevailing in the country. More importantly the state is open to transformation of the traditional content-focused curriculum to programmes that meet both the needs of students as well as the country. Other issues including the governance, funding and organisation of schooling in SA and in the province are also regulated. The internal policy documents particularly focus on practical procedures and requirements including applying for state subsidies, establishing private schools in Gauteng and funding formulas.

2.4 Approaches to curriculum design and development.

There are several definitions of curriculum (Stenhouse 1975: 4) but may be broadly defined here as referring to 'the teaching and learning activities and experiences provided by schools' (NEPI 1993: 102) and includes a number of design dimensions namely the idea, aims, content, pedagogy and assessment. Curriculum design then refers to the coherent designing of a particular programme but is however informed by particular theoretical curriculum models, hence the varying approaches to curriculum design.

At least four approaches to curriculum design are available in the literature. They are the behavioural objectives model (also known as the traditional model) (Tyler 1949), the process model (Stenhouse 1975), the naturalistic model (Walker 1971), and the sociology of knowledge model (Bowers 1982). Each of these have varying foci, and therefore useful in certain ways.

therefore a complex process and needs the consideration of several critical factors that influence the change process.

2.2 Studies on the implementation of innovations.

Several studies (Linden 1983; Schulze 1972; Cannon 1995) indicate that implementation is not a one-off event but includes strategies and various factors including qualified personnel committed to the aims of the programme and adequate resources that sustain the implementation process over long periods of time. The foci of these studies have been on the implementation of specific programmes and the factors that affected the implementation process rather than on implementation theory. The programmes considered in the aforementioned studies, namely Outward Bound and Community Service, are relevant to the present study because of the activities-based rather than content-based nature of the respective programmes and the underlying drive for transformation of curriculum and the development of attitudes, values, and skills.

2.3 Policy documents.

Policy documents reviewed may be categorised as (a) published national and provincial state legislation and includes the Constitution of the RSA [CRSA] 1993, National Education Policy Act [NEPA], 1996; South African Schools Act [SASA] 1996; and the School Education Act (SEA), 1995 (Gauteng) and, (b) unpublished internal policy and regulatory documents particularly of the state department responsible for delivery of education in the Gauteng province.

A review of these policy documents indicate that old

2.1.4.4 Linkage. 'Linkage' (Havelock 1973: 165) essentially refers to a unification of Havelock's aforementioned implementation strategies. It involves a PS process which links to an outside resource system, which in turn may be linked to more and more remote expert resources which may become accessible to the user via the user's resource agent. The user's peculiar needs are nevertheless, always paramount unlike the RD &D where user's needs are often ignored. Linkage may be suitable for a single school which requires expertise not readily available within its own system.

2.1.4.5 Mutual adaptation and development. 'Mutual adaptation and development' [MA &D] (Dalin 1978: 96; McLaughlin 1976: 340) refers to an implementation process whereby both school and external agency play a role in the implementation process. MA &D may be contrasted to both implementation by RD &D where the state imposes upon schools an innovation with little or no regard to the wishes of the local school or its community, and to PS where the implementation may be a purely school based process. MA &D needs both and is best suited for a situation where both school and external bureaucracy have a mutual role to play in the implementation process.

Development is central to the MA &D process, where the school is engaged in contributing to the development of the programme, and where the school takes on the characteristics of a 'learning organisation' (Senge 1990: 14) that is where every participant in the school learns and grows.

Managing change in an educational environment especially with regard to the implementation of programmes is

needs, search for solution relevant ideas and information, take decisions to the best alternatives and finally, adopt a particular innovation as a solution to the users problem. (Havelock 1973: 155)

2.1.4.2 Research development and diffusion. On the other hand the 'research, development and diffusion' [RD &D] model may be more suitable to implement a programme on a much wider scale. (Havelock 1973: 161) This model generally involves massive upfront funding for research and development, often spans a long period of time, and involves a division of labour between expert developers and passive users. It is designed for mass dissemination rather than to solve a special local problem. It uses 'power-coercive' strategies whereby new ideas and approaches are imposed on teachers from bureaucracies or curriculum developers rather than 'empirical-rational' strategies which promote change through demonstrations of their validity and desirability as in the PS model. (Bennis, Benne and Chin 1969 in Kelly 1989: 129)

2.1.4.3 Social-interaction. Where implementation is not dependent on massive upfront funding for research and development, systems and bureaucracies, 'Social-Interaction' [SI] may be the preferred model. (Havelock 1973: 159) The SI model shifts focus to diffusion of ideas rather than research and development of curriculum. (Stenhouse 1975: 220) It comprises of networks of ideas and approaches which are practised by committed teachers and professionals and which become known through interaction and word of mouth. Ideas and approaches that work in the teaching-learning activity spread like wild fire and are taken up by teachers who want to do better and better in the course of their professional growth and development.

DC-3 that formed a successful ensemble and laid the basis for further progress. The manufacturers of the Boeing 247 had to make adjustments to their aircraft later by incorporating the missing component technologies to make it successful.

Similarly, Senge argues that successful innovation i. human behaviour, requires the convergence of five component learning disciplines (which he refers to as 'the fifth discipline'). When Senge's theory is translated to implementation of programmes in schools, we need also to search for a combination of critical factors that impels a programme to successful implementation.

2.1.4 Implementation strategy.

The implementation 'strategy' refers to the explicit sequences of action steps or tactics that make up the strategy for the implementation of a programme (Havelock 1973: 153) and what is needed in successful implementation of particular programmes is an appropriate strategy as Fullan (1991: 16) points out: 'We need powerful reforms and powerful strategies to obtain powerful change'. Researchers (Dalin 1978; Havelock 1973; Schon 1971 (in Kelly 1989: 126) have developed certain strategies, also referred to as models, appropriate to different kinds of situations to support and sustain curriculum innovation. Five models are briefly reviewed below.

2.1.4.1 Problem-solving. A 'problem-solving' [PS] model may be more appropriate for a single school with a particular problem because it allows the 'user', with or without outside assistance or support to diagnose felt

is very difficult to say which are the critical factors in general terms for all programmes. Each programme is unique and needs to be considered separately and would sometimes need several years of rigorous research under different conditions to determine the critical factors influencing its success or failure.

Having one or more critical factors is also not sufficient to ensure successful implementation. What seems to be important is the notion of 'combination of critical factors'.

2.1.3 Combination of critical factors.

Combination of critical factors refers to the idea that it is not the critical factors by themselves individually, or as a series of independent factors that operate independently that impacts on the implementation process, but it is the amalgamation, integration and collective interaction of all critical factors that operate in concert. According to Fullan (1991: 67) the critical factors 'form a system of variables that interact to determine success or failure' of the attempt to change by means of the implementation process. This conception is illustrated by Senge as follows.

Senge's conception of innovation in engineering suggests that the movement of the idea from invention to innovation brings together diverse 'component technologies' for it to succeed. (Senge 1990: 6) Senge gives the example of two competing aircraft, the DC-3 and the Boeing 247 to illustrate the point. Given that both companies producing the aircraft probably spent millions of dollars on research and development, he asserts that it was the convergence of five critical component technologies that were brought together in the

implementation

...consists of the process of putting into practice an idea, programme, or set of activities and structures new to the people attempting or expected to change.

Fullan (1991: 47-8) reports that for many researchers the implementation process includes a number of phases beginning from initiation, installation or insertion, to continuation and expansion and each phase comprising of a number practical steps depending on the nature of the change. According to Havelock (1973: 137) implementation refers to the practical operationalisation or 'utilisation' of the innovation. A programme may be disseminated, but 'often not implemented in practice'. (Stenhouse 1975: 210) Thus implementation for change in education settings refers to a process inextricably connected to practice rather than a one-off event that occurs mechanistically.

But implementation is a complex process impacted upon by several 'critical factors', which is discussed next.

2.1.2 Critical factors that affect implementation.

According to Fullan (1991: 66) evidence points to a 'small number of key variables or 'critical factors' that influence successful implementation. These critical factors may include the innovation, role of the principal, and/or the underlying thrust of a vision that powerfully influences the implementation process. But while it may be possible to identify the critical factors that commonly influence change in practice Fullan (1991: 66) and Dalin (1978: 88) point out that it

CHAPTER TWO: LITERATURE REVIEW.

The literature review focuses on the following inter-related issues integral to the study: managing change, implementation of innovations, state policies, approaches to curriculum design, and CAS as an activities-based programme.

2.1 Managing change.

Havelock (1973: 4) broadly defines change as 'any significant alteration in the status quo...which is intended to benefit the people involved'. Planned change, however, refers to change that comes about through a deliberate process which is intended to make both acceptance by and benefit to the people who are changed more likely. (Havelock 1973: 5; Fullan 1991: xiii) But educational change theorists warn of the high risk of failure in proceeding with change efforts in educational settings without first understanding what should change, how to go about bringing about the desired change and the forces that affect change. (Fullan 1991; Dalin 1993; Havelock 1973) Managing the change effort therefore becomes an important issue and in particular concepts dealing with that change effort. I will review each of the following concepts in turn: implementation, critical factors, combinations of critical factors and implementation strategies.

2.1.1 The concept of implementation as process and practice.

Implementation of curriculum is neither 'replication' nor 'dissemination' (Senge 1990: 5; Kelly 1989: 125) as in the reproduction and distribution of computer software packages. Rather as Fullan (1991: 65) states,

are voluntarily established to cater for special needs of communities and are mainly founded by private sector persons or organisations who tend to be highly committed to their particular missions or ideals. Although these schools are regulated by the state, they seem to enjoy a large measure of autonomy in their decision making. This schooling sector 'is very small, but it is important and appears to be growing' (NDE 1996b: 15) and caters for less than 2% of all school students. (NDE 1996b: 38) The term secondary refers to schooling from standard 6 to matric.

Because of the complexity of the public school system and the various ailments attached to that system, an alternative way to proceed with the implementation of CAS, as an activities-based programme, is to begin on a small scale, conceivably in a single purpose-built private secondary school.

Chapter two, reviews the literature on the essential concepts and ideas that lay the foundation for the study. Chapter three explains the research methodology employed in this study. In response to the two research questions, Chapters four and five discuss, from evidence gathered, the implementation of CAS in all public schools in District C1, Gauteng and a purpose-built private school, respectively. Chapter six deals with concluding discussions on the research questions and the study.

implementing the programme in their respective classrooms. The school provided additional resources of up to R2000 raised from sponsorships and donations from parents and the local community, which the state was unable to provide. A partnership was thus forged between state, school and PEUP with the latter being the driving force in initiating and playing a key role in bringing state and school together to mutually assist one another the implementation process.

In contrast to the mutual adaptation strategy argued for the implementation of CAS in public schools in Gauteng, Youth Preparedness [YP], a programme designed exclusively for white school pupils and which had an underlying racist ideology, was clearly implemented top-down by decree of the state, not by mutual adaptation between individual school and the state, as is evidenced by the decree of the then Minister of Education (Kotzee 1972: 2-7) to principals of white schools:

Youth Preparedness is to be introduced as a compulsory curricular programme in all secondary schools, and special schools with senior sections, in January, 1972.

The state ostensibly provided the major portion, if not all the necessary funding for materials, transport, and other facilities such as off-school premises like camp sites/veld schools. (Botha 1995: 1) Not only was the philosophical and operating framework prescribed, the actual activities and the time to be spent on each activity and the actual content was also prescribed. (Kotzee 1972) The school's task was simply to carry out instructions, implying implementation by power-coercion.

YP was driven by the state instructing white school principals and teachers to follow orders. The implementation of YP is a clear case of coercion being state designed and implemented by decree. There was

seemingly impossible without the aforementioned policies. The school also paid from its own resources certain costs relating to consumables, transport and training of teachers. Thus a relationship of mutuality drove the implementation of DT rather than one-way state imposition.

Another case in the South African context where mutual adaptation is evident is in the case of the Primary Education Upgrade Programme [PEUP], an NGO which had its origin in the former Bophuthatswana homeland to address the need for upgrading inter alia classrooms and pedagogy in primary schools there. An analysis of PEUP (Holderness 1986: 1-7; Holderness and Altman 1992: 41-58) indicates that the strategy used comprised of a combination of both top-down and bottom-up processes. The NGO spearheaded the school upgrading programme which included new ways of learning and teaching in partnership with the state and the public schools. The project was spurred on by motivating pronouncements and exhortation by the state appointed Lekhala National Education Commission in 1978 in the Batswana concept of *popagano* (co-operation, self-reliance, and creative renewal) thereby giving a new vision to education policy in the recently declared independent state. The Bophuthatswana state Department of Education sanctioned the project and financially supported it by fully funding the salaries of 17 PEUP Organisers for each of the 17 districts and by providing R400 to each school that collected the same amount from the community and other fund raising methods for school furniture for 50 pupils.

The schools on the other hand committed themselves to making several improvements including painting of the classroom walls, doors and window frames. Principals co-operated by allowing the programme to be implemented and supporting the efforts of Organisers and Circuit Teams. Teachers committed themselves to attending workshops for training purposes and actually

style on the headmaster, or increased parental support and involvement. This has to come from the school.

Mutual adaptation is evident in the case studies that follow.

In the case of Gauteng Boys' High School [GBHS], a Model C public school, wide powers were given to the school by the previous National Party government which contributed to the implementation of the Design Technology [DT] programme. The school was empowered to implement and finance additional fields of study over and above choices within the prescribed national curriculum, in terms of a new policy of the House of Assembly [HOA] (1992a: 7) where the governing body of the school had the power to make and implement decisions with respect to:

the exercise of choice, but subject to the approval of the Executive Director, with regard to courses and subject packages within the set curriculum at national level which the school offers its pupils, and to implement and finance additional fields of study with the permission of the Executive Director;...

The state provided subsidised funding of teacher salaries that was determined according to pupil numbers and official education policy. (HOA 1992a: 16) Other resources that the state provided 'free of charge' included existing buildings and equipment which were transferred to the Governing body in terms of asset transfer provisions of the new dispensation for white schools. (HOA 1992b: paragraph 2)

The facilitative legislation and supportive policies of the state encouraged key participants at GBHS to initiate an innovative DT programme which incorporated new problem-solving approaches and replaced the traditional Industrial Arts programme, a move which was

Furthermore, because the state is limited in its ability to fund all expenses of state schools, it acknowledges that parents and schools at grassroots can play an important role in supplementing the budgetary requirements at the local school level. A 'partnership funding approach' implying state, parent and school involvement in making financial contributions was recommended in the Hunter Report. (NDE 1995: xiv) Following the recommendations made in the Hunter Report (Mokgalane and Vally 1996, 6-7) a new funding formula has been enacted in SASA (1996) whereby public schools are empowered to levy a compulsory school fee based on a variety of factors for example, parents ability to pay (SASA 1996: S39-41), and also receive voluntary contributions (SASA 1996: S37(2)), over and above state subsidy for teacher salaries, materials, equipment and other material support.

This new policy is further evidenced in SASA (1996: S36) where the partnership responsibility of governing bodies is clearly laid out:

A governing body of a public school must take all reasonable measures within its means to supplement the resources supplied by the State in order to improve the quality of education by the school to all learners at the school.

In a mutually adaptive process, it is the individual school that has to creatively respond to the facilitative and supportive legislative, funding and curriculum related policies of the state. The school simply cannot provide the high level of funding that the state can provide, but it can supplement state funding. The state, on the other hand, cannot design curricula to cater for all circumstances and all contexts, it thus empowers local schools by means of facilitative policies to develop their own curricula within broad frameworks. Similarly, the state cannot enforce a positive school ethos, teacher commitment, or a particular leadership

evidenced in SASA (1996: S21(1)(b)) which provides for governing bodies:

to determine the extra-mural curriculum of the school and the choice of subject options in terms of provincial curriculum policy.

Here power is being devolved to school governing bodies.

The state, however, in addition to facilitative curriculum legislation has supportive policies in the area of funding: 'The state must fund public schools from public revenue on an equitable basis'. (SASA 1996: S34(1)) While apartheid era funding was racially based and iniquitous being biased towards whites and disadvantageous towards Blacks (African, coloured and Indian), there seems to be a distinct move to redress past imbalances by a phasing in process whereby equity in funding will be attained by 1999. (Table A). (de Villiers 1995: 1; NDE 1995: 63-84)

TABLE A

Per Capita Expenditure (excluding former homelands)

	1986	1992	1994
	R	R	R
African	610	1 775	2 184
Coloured	1 330	3 231	3 691
Indian	1 952	3 959	4 687
White	2 746	4 694	5 403
National average	-	1 870	2 222
(including homelands)			

(Source: 1986 and 1992: DNE 1994b: 63; 1994: NDE 1995: 15)

give and take and accommodation on the side of the state as well as on the side of the school as a two-way process in contrast to pure top-down authoritarian strategies of implementation. On the one hand the state needs to provide facilitative curriculum implementation legislation and policies, and supportive funding in terms of teacher salaries, training, materials and equipment according to its own means and limitations. On the other hand, the school needs to provide an ethos of growth and development, committed key roleplayers or participants, and certain resources within its peculiar means and limitations. Both have to adapt according to each others circumstances - to draw on each others strengths and to compensate each other for deficiencies, and for broadly growing and developing schools as learning organisations. (Dalin 1978: 95-9)

Recent state legislation and policies pertaining to public schools suggest that the state has committed itself to more open and facilitative educational policies, moving away from pure top-down, closed and restrictive approaches. The Draft White Paper on Education and Training acknowledges that apartheid era policies favoured top-down authoritarian approaches (NDE 1994: 9) and commits the Ministry of Education to a 'fully participatory process of curriculum development' (NDE 1994: 15) where curriculum will no longer be developed solely by the Ministry but will involve a host of other roleplayers including non-governmental organisations [NGO] and previously excluded teacher educators. The state has the 'responsibility for setting norms and standards for the education system, which involves the development of curriculum frameworks and core curricula' (NDE 1994: 14) which in turn will purportedly give significant scope at the provincial, district and local school levels to develop a more contextual curriculum within the broader frameworks and norms and standards provided by the state.

The facilitative policies of the state is further

devolution of power is consistent with the shift to democracy and the transformation presently taking place in the education system of the country. I will focus on the two interlinked notions of (1) mutual adaptation and (2) development.

4.1.1 Mutual adaptation.

The notion of mutual adaptation refers to a combination of both top-down and institution based or bottom-up processes (Dalin 1978: 96) and involves a two-way process of accommodation and give and take. It contrasts with one-way processes of implementation by coercion from state to school, from centre to periphery, as in the RD & D model (Havelock 1973: 161), or the thrust of the PS model (Havelock 1973: 155) where it is that teachers in a school may go it alone, with support from an outside agency or consultant. Mutual adaptation may also be seen as being similar to Havelocks concept of linkage (Havelock 1973: 165) where it is that there is some kind of tie between the school and the external resource person or system in terms of how innovation proceeds. The state, rather than an NGO, as the external resource system, may then be a key partner in the implementation process at the local school level in accordance with the linkage strategy. Unlike Havelocks SI model (Havelock 1973: 159) where the implementation process is loosely dependent on networks of ideas and approaches between teachers and professionals, mutual adaptation seems to take a more planned and structured approach where the process involves a deliberate attempt by both state and school to implement a particular programme according to their capacities and limitations.

In the case for the implementation of CAS in APSS DCI(G), it seems that a sense of mutual adaptation is needed between the state as the ultimate regulator of public schools in the country and individual schools responsible for implementing CAS according to local contexts and resources. There needs to be a process of

CHAPTER FOUR: DISCUSSION OF FINDINGS ON IMPLEMENTING CAS IN ALL PUBLIC SECONDARY SCHOOLS, DISTRICT C1, GAUTENG.

It has been established that implementation refers to a complex process involving a combination of critical factors within an implementation strategy to put a programme into practice. In this chapter I turn to the discussion of findings to the first research question of the study: How can CAS be implemented in all public secondary schools in District C1, Gauteng [APSS DC1(G)].

The focus of the discussion here will be on the implementation of CAS in the mass education sector of schooling, as opposed to private schooling because of the possible impact and potentially extensive outreach that CAS can have on a larger scale in 38 public secondary schools, District C1, Gauteng, (Daya 1997: 1) than in a single purpose built private school.

In response to the first research question, I will firstly argue for Mutual Adaptation and Development (MA &D) as the implementation strategy needed. I will then argue for the critical factors followed by a definitive course of action indicating how to implement CAS in APSS DC1(G) involving a combination of critical factors within the MA &D strategy.

4.1 Implementation strategy for the implementation of CAS in all Gauteng public secondary schools.

The case for the implementation of CAS in mass education is that it is likely to succeed there because both the state and individual schools are needed to play specific roles in the implementation process so that the programme is not imposed from the side of the state but where space is created for schools also to play their part. While the process is largely state driven and supported, it is evident that the state intends to devolve more power to individual schools and teachers to contribute to local curriculum development. This

3.4 Coding and analysis of data.

Data collected from the diverse sources was coded and classified on the basis of similarities in terms of common categories or themes related to the implementation process for the purpose of analysis, evidence and critical discussion. (Cohen & Manion 1994: 286; Miles and Huberman 1984) The categories were gleaned from the literature and are indicated below:

- Statutory provisions impacting curriculum implementation
- State education finance policies and subsidies
- Key roleplayers
- Funding CAS
- Funding private schools
- Curriculum autonomy
- Time tabling of CAS programme
- School resources
- Support mobilisation for establishing a school
- Support systems
- Teacher training

In summary, an unstructured descriptive design was used in this study because of the type and disparate nature of data sources for the purpose of drawing inferences for the implementation of CAS in public schools and a private school in Gauteng.

and/or influential positions in educational settings either in state departments or in public and/or private schools on the implementation of curriculum innovation.

3.3 Samples used for gathering data.

A 'purposive sample', (Cohen & Manion 1994: 103) that is one chosen to satisfy the specific needs of the researcher in this case with respect to data related to the international experiences in the implementation of CAS through the use of postal questionnaires. A purposive sample of 10 CAS schools 9 recommended by IBO CAS Chairperson (Griffin 1994: 3) and 1 selected because of its proximity to Johannesburg was used.

A 'convenience sample' (Cohen and Manion 1994: 88) denoting persons who are readily available and easily accessible of four key informants were interviewed to provide valuable insights and ideas into implementation strategies relevant to public schooling. A further convenience sample of five key informants from existing private schools were interviewed because of their direct experience in setting up of private schools and implementing innovative programmes there. Two telephonic interviews were conducted with key informants connected to the Swaziland IB affiliated school to glean data from their experiences of implementing CAS there.

Generally, where deemed necessary, data was also obtained by personal and telephonic interviews and fax from key informants in government or other service organisations. This was done where clarification or further data was needed, or where it was impractical to travel long distances to obtain certain specific data.

3.2 Methods used for gathering data.

A variety of methods were used for gathering data in relation to the two research questions. (1) Examining policy documents such as the National Education Policy Act, 1996; the South African Schools Act, 1996, and the (Gauteng) School Education Act, 1995 *inter alia* were crucial. These documents are used by the state to regulate implementation policy including establishment of schools, funding, and curriculum autonomy. (2) Documents that emanate from IBO on the implementation of CAS were examined for data that may have an impact on implementation strategies in schools in SA. Because the CAS programme is being considered in this study for implementation in SA schools, it was important to gain insights into CAS implementation strategies adopted by IBO and affiliated schools, particularly to know what was required, how it was organised, and funded. (3) One case study of a programme, namely Primary Education Upgrade Programme, implemented in the South African context was examined for data relating to the factors that affected its implementation in public schools.

(4) Postal questionnaires were used to obtain data from IBO affiliated schools as most of IBO schools are located abroad in South-East Asia and elsewhere and therefore not conducive nor cost-effective for personal interviews. (Cohen & Manion 1994: 109)

(5) Telephonic and personal 'unstructured interviews', referring to more open and flexible interviews where the questioning of the interviewee is governed by research purposes but where the content, sequence and wording of the questions are determined by the interviewer (Cohen and Manion 1994: 309), were conducted with key informants because of their grounded personal experience

CHAPTER THREE: METHODOLOGY.

Data gathering for a front-end analysis of questions relating to the implementation of CAS in SA schools suggests the need for a research design that is different from experimental modes.

3.1 The research design.

The research design here is largely unstructured and descriptive denoting subjective interpretation rather than a structured experimental one needing measurement. The design is unstructured because the study needs the flexibility and receptiveness to uncover implementation data from wide and disparate sources arising from a variety of contexts rather than from a single source. Such data is grounded in (a) past experiences of implementing innovations in general as well as in (b) implementing CAS internationally, and (c) current policy and legislation that impact on implementation and educational change in the country.

Clearly, descriptive techniques elicit qualitative type of data required from the aforementioned sources. Descriptive research techniques here include: (a) open ended questioning of key persons in 'key informant interviews' which refer to interviews with persons who tend to be particularly well informed, articulate, approachable or available (Wolcott 1988: 195) (Appendix G) and 'postal questionnaires' (Cohen and Manion 1994: 94) (Appendix H) and (b) examining relevant documents to illuminate the research questions and to contribute meaningfully to implementation strategies that may be viable here, in public and private schools in SA.

encourage hesitant staff members to put time and work into development efforts. On the other hand, if the head expresses skepticism and hesitation, he or she may also get support from other skeptical colleagues.

Critical to the implementation of CAS, given the facilitative policies of the state, as part of the MA & D process, is the role of the headmaster in providing leadership in supporting and mobilising the energy and co-operation of all the other key participants in the system and creating a school ethos of a learning organisation, where he/she sets the tone and pace for the implementation through active engagement.

The role of the headmaster as a critical factor was manifest in the case of GBHS, where he was evidently the driving force together with a team of dedicated teachers in the implementation of the DT. (Edward 1995: 1) The initiative came directly from the headmaster who had enlisted the support of the governing body, teachers and the extED, the state agency that supervises the administration of the school. The programme is now running for the third year. (Edward 1995: 1)

Another case where the headmaster was a critical factor was in the PEUP programme. It was a group of seven school principals who were first motivated by Mrs. Bodenstein, a college lecturer and founder of PEUP. These seven principals who were supported by both PEUP and the state, committed themselves to the implementation of the programme, not because of coercion, but because of a personal desire as in a learning organisation, in their respective schools in 1979. These principals were the driving force in drawing in others, especially parents, teachers and the wider community to support the implementation of the PEUP programme in their respective schools. (Holderness and Altman 1992: 43)

Further evidence of headmaster leadership is to be found

10-11) 'key participants' inside the school refer to the headmaster, teachers, students, and key participants in the immediate environment of the school referring to parents, consultants and the district administrator. For the implementation of CAS in APSS DC1(G), the critical key participants include those inside the school as cited above and parents in the immediate school environment, the DD's role having been discussed above. The IBO as an external agency may be drawn upon in the initiation phase to start the implementation process at the outset but their involvement is not necessarily deemed as a critical factor.

4.2.2.1.1 The headmaster. The headmaster as a key participant in a school is a critical factor in the implementation of CAS at his/her respective school because of his/her role as head of the school and more importantly because of his/her role as 'gatekeeper' (Fullan 1991: 11), meaning main agent or blocker (Fullan 1991: 76) to change. According to research findings by Berman and Mc Laughlin (1977: 124 in Fullan 1991: 76), 'projects having the active support of the principal (headmaster) were most likely to fare well'. And according to Fullan (1991: 76) again, there is an abundance of evidence that describes how and why the headmaster is necessary for effective implementation:

The principal (headmaster) is the person most likely to be in a position to shape the organisational conditions for success, such as the development of shared goals, collaborative work structures and climates, and procedures for monitoring results.

It follows that if the headmaster does not support the programme or project, it is unlikely that implementation will take place, as Dalin (1993: 41) points out:

The attitude of the head is one critical factor in the development process. Full support from the head may create a positive working climate and also

As far as teacher provision is concerned, the present government has committed itself, through negotiations at Education Labour Relations Council, to provide teachers to all public schools based on a teacher pupil ratio of 1:40 at primary and 1:35 at secondary level. The ratios would be phased in over five years, and all teachers at a school, including the principal and music teachers, would be part of the ratio. (Edusource 1996a: 10)

For the implementation of CAS in District C1, Gauteng, because funding is not determined by subject taught or number of teachers in the employ of the respective provincial departments, but by the number of pupils in the province, the funding of teachers, materials and equipment for CAS will necessarily be dependant on the approval of CAS as a programme. Special direct funding will however be required by the district office for initial project co-ordination and INSET as is the case with the 'Technology' programme presently being piloted in 20 schools in Gauteng. (Van Tonder 1996: 1)

Critical for the implementation of CAS in APSS DC1(G) within the MA &D strategy is therefore state approval of CAS as an instructional programme and state funding support.

This leads to the discussion of various critical factors at school level.

4.2.2 Critical school factors.

School factors refer to those (factors) arising from the role of the public school as implementer of the CAS programme. Critical to the implementation of CAS are (a) key participants and the (b) school resources that the school brings to the implementation process as part of the MA &D strategy at the local school level.

4.2.2.1 Key participants. According to Fullan (1991:

To implement CAS in APSS DC1(G) it is unlikely that additional teachers would need to be employed but instead existing teachers would need to be trained. This is so because the funding of individual subjects is not determined in terms of teacher provision and remuneration because teachers are provided for by the state on a per-capita basis rather than on a subject basis, as is evidenced from the funding policy of public schools.

Funding of public schools is determined at the national policy level by NDE, rather than at provincial level. NDE obtains its total education allocation from the National State Budget. From the education vote various amounts are set aside for various divisions according to a formula that includes Departmental expenses, tertiary education, and college-school [CS] education. It is the CS budget that is handed over to the provincial governments to administer on behalf of NDE in terms of policies laid down by the latter for the funding of CS education under the jurisdiction of the province. The CS budget is not determined on the basis of subject taught or on the number of teachers in a particular department (for example, GDE). The funding formula is however determined on the basis of the number of pupils countrywide, and then an equitable per capita allocation per province is calculated. (Viljoen 1995: 1; de Villiers 1995: 1)

This formula is presently complicated because of the past imbalances based on race, but is being redressed on an evolutionary basis over five years. This means that until 1999, allocations for formerly white schools will be marginally higher than African, Coloured and Indian schools. See Table A (4.1.1 above). No statistics are available giving a breakdown by race of the equity being achieved across the various racial groups, according to Educational Foundation, a group that collects and analyses educational statistics.

national policies and constitutional principles, Donly could see no reason for any objections, and would in fact support the implementation of programmes that fostered tolerance, respect and mutual understanding in all schools within his district. He also indicated that he had the necessary autonomy to implement such programmes (as described by myself) in schools within his district, provided that there was adequate consultation with relevant stakeholders at the local school level.

Facilitative and supportive state curriculum policies are thus critical for the implementation of CAS in APSS DC1(G).

4.2.1.2 State funding. State funding refers to the funds needed from the state for the implementation of CAS in APSS DC1(G) in terms of the MA & D strategy.

State funding is a critical factor for the implementation of CAS in APSS DC1(G) as part of the supportive role that the state plays in public schools because state funding is needed for various elements of the implementation process including project co-ordination, teachers, INSET, materials, equipment, and transport. Without state funding it is unlikely that CAS can be implemented even if there are facilitative and supportive curriculum policies.

The major element of expenditure would be the cost of teachers in the form of teacher remuneration. Educator remuneration for public ordinary schools excluding special schools such as for pupils with learning disabilities, comprised of 78.03%. This figure rises to 84.36% if the remuneration of other support personnel are included. (DNE 1994b: 34) In a recent press statement, Metcalf, the MEC for Education, Gauteng, stated that teacher salaries consumed 85% of education budgets. (Saturday Star 6/7/1996: 1) It is on this cost that I will focus my attention.

administration of a school. The case of DT at GBHS again demonstrates that where a school has the ability and capacity to take curriculum decisions, the provincial authorities must relent and facilitate that development.

One of the many directive principles of SEA (1995: S5(1)(c)) reads as follows:

The education process shall be aimed at fostering independent and critical thought.

It is legislation and policies like these at the provincial level that would be needed to facilitate teachers at the local school level to be creative with regard to the implementation of CAS.

4.2.1.1.3 The district level. The district level denotes the District Director [DD] and his/her office as an integral part of provincial educational structures. The DD is responsible for the support of public schools within one of several designated geographical areas. District C1 is one such district. For the implementation of CAS at public schools at the district level in Gauteng the approval and support of the DD is a critical factor because he/she acts as officer of the GDE responsible for the administration of education and for providing district schools' with consultancy and training support. He/she may also act as gatekeeper to innovation in the schools under his/her district. The DD is obliged to pursue educational policies of the province in terms of SEA, 1995.

In line with decentralisation and the devolution of power, the DD could also be approached to implement a programme at the district level, provided that it did not conflict with national policies, norms and standards nor did it challenge any of the constitutional principles including non-racialism. This view was confirmed by Donly (1995: 2), DD, District C1, GDE. And if the ethos and aims of CAS are in line with

programmes is not a *carte blanche* one. To implement DT permission was sought from EXTED but actually came from NDE. (Edward 1995: 4)

4.2.1.1.2 The provincial level. For the implementation of CAS in APSS DC1(G), it is critical that there are facilitative, supportive and empowering policies also at the provincial level of the education system. This is so because firstly approval by GDE at the provincial level of CAS as a school subject is required and secondly, the nature of CAS demands that teachers and students at the local school level are empowered to make curriculum content decisions in determining activities.

The GDE is responsible for delivering and controlling educational provision in Gauteng, particularly with regard to curriculum, as evidenced in the School Education Act [SEA] (1995: S6(c) whereby:

Subject to any norms and standards set by the appropriate national body, the MEC may certify, and withdraw the certification of:

- (i) the syllabi of, and conditions for admission to, courses at any school or centre of learning; and*
- (ii) the content of, and conditions of admission to, courses at any school or centre of learning.*

It is evident from the above legislation that CAS would need to be 'certified'. According to GDE Director of the Gauteng Institute of Curriculum Development [GICD], the GDE is open to ideas and proposals from both within and outside the education system. The provincial Head of Department may be approached by any person or group, if the programme is provincially targeted and complies with the ethos of the constitution. (Imran 1995: 7)

With regard to the empowerment of teachers to take decisions on professional matters such as CAS content, SEA (1995: Section 28(3)(c)) clearly empowers the principal and his/her staff with the professional

4.2.1.1 Legislation and curriculum policy. In the case for the implementation of CAS in APSS DC1(G), what is critically needed is facilitative and supportive legislation and curriculum policy at three levels namely national, provincial and district, that would foster autonomous and creative decision making at the local school level.

4.2.1.1.1 The national level. For CAS to be implemented at the provincial level and district level what is critically needed is the approval of CAS as a valid 'instructional programme' (DNE 1994a: v) by the National Department of Education [NDE] not for imposition but for facilitation. Without that approval the Gauteng Department of Education [GDE] may not grant approval to districts within the respective province and thus CAS may not be implemented. This requirement is not according to any legislation but national departmental policy. (Viljoen 1995: 3)

On the other hand there are no statutory regulations excluding any particular subject from being approved and listed as an 'instructional programmes' (DNE 1994a: v) and that the NDE is generally open to receiving proposals from any quarter, be it from the public or private sector, individual school or organisation. However, such proposals have to comply with specific criteria based on need, rationale, financial implications, and the design dimensions of the programme, and broadly be based on the norms and standards set by the national department. (Viljoen 1995: 3)

The approval requirement at the national level is also evidenced in the case of implementation of DT at GBHS. The DT programme was a school-based initiative because the state specifically empowered its governing body, 'to implement and finance additional fields of study with the permission of the Executive Director;...' (HOA 1992a: 7) But the authority to implement additional

Development of CAS in Gauteng schools, thus, implies a two-way process allowing local schools to be creative in developing activities while the state's contribution is in providing frameworks and guidelines.

Thus the implementation strategy of MA &D is needed for the implementation of CAS in Gauteng public schools. CAS needs the state to play a role of facilitation and support rather than of coercion and imposition while CAS needs the school to bring its own human and material resources to bear on the development of activities albeit limited in their respective capacities.

4.2 Critical factors needed for the implementation of CAS in all Gauteng public schools.

Critical factors, as explained in the literature review, refer to the variables that powerfully influence successful implementation. In relation to implementing CAS in APSS DC1(G), several critical factors are needed. These are linked to (1) the state (2) the school and the (3) characteristics of the innovation. What these critical factors refer to, why these are critical for the implementation of CAS and the case for each critical factor is discussed below.

4.2.1 Critical state factors.

State factors refer to those (factors) arising from the role of the state as ultimate regulator of public schools. Central to the implementation of CAS in APSS DC1(G) is the role of the state as facilitator and support agency. Since public schools predominantly aim at mass education largely controlled by the state, implementation of programmes are intricately bound with state education policy and funding. State support in terms of (a) legislation and curriculum policy and (b) funding, are therefore critical for the implementation of CAS.

the different IBO schools throughout Europe, America, Africa and South East Asia. For example, the campus of Lester B. Pearson College of the Pacific is situated at Pedder Bay, Vancouver Island, British Columbia. One of the categories of activities of CAS at this college has to do with Coastwatch, providing a rescue service at sea. (LBPCP 1995b: 2; Brown 1995: 20) Clearly this activity may not be done in landlocked Swaziland but service activities are offered in forestation and other environmental related activities, amongst others adapted to local circumstances. (Linden 1983: 51)

Each individual IBO school develops its own creativity, action and service activities, as is evidenced above. And these activities are often developed according to student interests as suggested by James and Newton (1995: 4):

The scope of the CAS programme is broad in that activities are included in the interests of students involved. Its strength lies in the fact that students pursue their own interests and do not become bored with the programme.

Development of CAS in IBO schools is, thus, devising and adapting activities to local conditions.

In contrasting Youth Preparedness [YP] to the above notion of development within the MA &D strategy, it seems that there was no programme development work required at the level of the local school because as stated earlier, the programme was prepackaged and instructions as to time allocations and specific activities to be engaged in were given or handed down prescriptively to school principals. Clearly, YP was implemented by 'hydrostatic pressure', (Parlett & Hamilton 1976) state bureaucracy, and ideologues giving little or no space for development of activities at the local school level.

the selection of content, the pedagogy and assessment of the programme on the one hand; and the school may develop the specific content or activities and support teachers in the development of the appropriate pedagogy and assessment techniques on the other hand, in accordance with the philosophy, aims and principles as provided or directed by the state (and IBO). The state's role here is similar to that in the RD & D strategy where certain aspects of the programme are prescriptive, whereas the school's role on the other hand is similar to the PS strategy for implementation where it is that the problem of designing relevant activities would need to be done at the school level.

The notion of development pressed for here is evident in the case of DT programme at GBHS. While the DT programme was broadly sanctioned and supported by the state, it is evident that development took place at school level as suggested by Murray (1995: 7),

DT was created by ourselves... We draw on what's happening at St Andrews and about four other schools... but basically producing everything ourselves.

Some aspects of the development of DT at GBHS were also informed by 'visiting educationists' who made key people at the school aware of the 'shifts' to problem-solving approaches, which refers to pedagogy of DT, in programme development. (Edward 1995: 1) Development of DT at GBHS was clearly a case of the ability of the school to grow and improve a programme.

In the case of IBO, the broad philosophical frameworks and principles and procedures for the development of CAS in IBO partner schools are provided by the IBO in the form of guidelines, (IBO 1992: 3-4) but the actual CAS activities are devised at the local school level according to local needs and contexts. This is evidenced by the variety of CAS activities that are undertaken in

little obvious space or creativity on the part of teachers and students to determine activities. There was no mutual adaptation.

In relation to the first research question, a process of mutual adaptation is, thus, needed between state and school suggesting this strategy for the implementation of CAS in all public schools in District C1, Gauteng.

4.1.2 Development.

Development is a multi-faceted term which in the MA & D strategy broadly refers to the ability of a school to pursue an improvement or growth process with or without external help and to be responsive to externally developed and/or directed innovations. (Dalin 1978: 96) In this sense, development is linked to a process whereby the institution or school is able to meaningfully contribute towards the improvement and continuous growth of the innovation. At the one extreme the state may prespecify and prepackage the innovation as in a teacher-proof computer programme, leaving no space for the school to be actively engaged in the improvement process, as in the RD & D model. On the other hand, the school may initiate and implement the programme entirely without the help of an external resource such as the state or an NGO, as in the PS model. The degree to which a school may rely on the state for specific aspects of the innovation will depend on its ability and capacity to be self-sufficient and vice versa. (Dalin 1978: 98-99)

More specifically, development here refers to the ability and capacity of the school to grow and improve the design dimensions of CAS particularly its content, which is based on some underlying philosophy, ideology or values. (NEPI 1993: 102; Stenhouse 1975: 12; Kelly 1989: 7) For development to take place the state, like the IBO in the case of CAS, may provide the philosophical framework, aims, and principles underlying

7) Committed headmasters perceived the benefits of the programme in upgrading classrooms which included improving teaching skills and positively impacting on the learning of largely disadvantaged primary school children. The state too was quick to support PEUP because, in a sense there seemed to be a fit between what the innovation offered and Lekhala Commission (1978) recommendations of primary school reform, in particular the Batswana concept of *popagano*. (Holderness and Altman 1992: 41-58; Holderness 1986: 1-7)

Another case where the characteristics of the innovation has been demonstrated as a critical factor in the implementation process is in the implementation of the Primary Science Programme (PSP), an activities-based science programme for teachers and pupils from disadvantaged backgrounds. The programme foundered when teachers felt that their needs were not being adequately met in terms of the top-down strategies adopted by the project organisers where materials and methods were imposed rather than involving them in course development. It was only when new partnership approaches of teacher involvement in the development of curriculum materials were introduced that the programme became relevant to teacher needs. 'The role of the project has clearly shifted from being a resource directing project, to being responsive to teachers' needs'. (Rauvenheimer 1992/1993: 67-80) Fundamentally the innovation persisted and steadily grew, despite the internal problems, because the innovation satisfied participant needs at a time when inadequately trained science teachers had to teach without having adequate materials.

Thus, the characteristics of the innovation, in this case of CAS, is critical to the implementation in APSS DC1(G) within the MA & D implementation strategy.

Having established an implementation strategy and argued for various critical factors I now turn to the combination and course of action needed in response to

critical for the implementation of an innovation to ensure that it clearly addresses real and relevant needs of the learner and teacher; that the programme must have a sense of vision in terms of its long term usefulness, value and benefit in the learning and development process of learners; that there is sufficient clarity about the design dimensions of the programme and its complexities, if any; and the practicality of its implementation denoting fit with teacher's situation, focus, and concrete how-to-do-it possibilities. (Fullan 1991: 69-73)

With reference to CAS as a tried-and-tested programme and as the international experience suggests, CAS addresses the need for an activities-based innovation in the overly content-based mainstream school curriculum in SA. Because activities are designed by teachers on the basis of a clear understanding of its design dimensions with learner interests, local context and resources in mind, teacher and student needs including empowerment, creativity, practicality and learning are largely addressed. Teacher competence is enhanced by clear implementation guidelines and INSET. CAS activities have the potential to contribute to the personal, social and spiritual development of students alongside their academic development and also has the potential to contribute to the RDP in terms of nation building through strategic activities including tutoring, health care, and literacy and in developing attitudes and values of, amongst others, reconciliation and inter-cultural understanding.

Evidence of the characteristics of the innovation as a critical factor is demonstrated in the following cases.

PEUP shows that because it was a pragmatic programme that met the real needs of the school communities, the innovation spread like wild fire and was implemented countrywide, in both urban and rural public primary schools, within a space of 5 years. (Holderness 1986:

school did not have the necessary resources, activities can be so designed that costs are not incurred such as in the case of Madrasa Al Huda as indicated by Wadvalla (1991: 1):

The school is located in Bombay city...It is a day school and various opportunities for CAS are available to our students within walking distance.

For the implementation of CAS in APSS DC1(G), within the MA &D strategy, each school will need to bring its own existing resources and creative abilities in the improvisation of resources, and use other means including obtaining sponsorships, voluntary/compulsory parent contributions and organising special fund-raising events in creative ways. However, certain schools in District C1 may have better resources and access to resources than others, for example a well resourced school in Mondeor, an established suburb, versus a poorly resourced school in Orange Farm, an informal settlement. Activities will then need to be designed accordingly. The costs could therefore vary from school to school 'but need not be prohibitive' as 'excellent CAS programmes exist in poor IBO schools' (Griffen 1994: 1) or as Farmer (1995: 1) put it: 'CAS absorbs as much or as little as you can afford'.

Thus the creative ability of the school in harnessing school resources in the implementation of CAS is critical.

I now turn to the final critical factor.

4.2.3 Characteristics of the innovation.

Characteristics of the innovation refer to variables such as the need for, clarity, complexity, quality and practicality of the innovation and broadly relate to the relevance of the innovation. (Fullan 1991: 68) According to Fullan (1991: 68) and Dalin (1993: 13), it is

In the case of the DT programme at GBHS, limited school resources prevented the school from acquiring certain kits for use in the DT programme, but the school was resourceful in adapting to their particular circumstances, as explained by Murray (1995: 7):

I think we've done very innovative projects that use waste materials, for example plastic Coke bottles and these sort of things - you can do an incredible lot of things with them. So a lot of those sorts of things have been incorporated into projects. It need not be a costly exercise, but the technology out there is amazing and some of the stuff is very expensive. There's electronic kits, computer kits - all sorts of things that we would like to get but it is prohibitively expensive. You can put together in different ways to create all sorts of things. It would be nice to incorporate. They are very expensive and you would have to have some government aid for that.

In the case of PEUP, at least R2000 was needed to upgrade or improve any one classroom in the school in terms of materials and equipment required, assuming that the school did in fact have classrooms. The state did not have the funding and neither did the school. Clearly the programme could not have been implemented without the necessary resources. The state, however agreed to fund parts of the requirements for example, school furniture, in partnership on a Rand for Rand basis. The school in turn had to rely on parental and community support to raise its share. (Holderness 1986: 3)

In the case of JIS, students are transported on a weekly basis from the school in Midrand to Chris Hani Hospital in Soweto to do a service project there, implying transportation. The school has the necessary resources for example, bus, driver, and implementation is thus facilitated. (Caston 1996: 2) On the other hand where a

Headmasters may with the assistance teachers and the DD, motivate parents to become involved in a variety of creative ways including (i) providing special skills (first aid, environmental management, food gardens) (ii) suggesting activities and (iii) being trained as a CAS leader and leading a particular activity. Parents may also be motivated through a variety of ways including (i) face-to-face meetings (ii) school newsletters (iii) personal letters or telephone (iii) CAS seminars and workshops (iv) special parent functions such as a 'CAS day' where audio-visual presentations may be made and (v) guest speakers may be invited.

This leads to the discussion of school resources as a critical factor.

4.2.2.2 School resources. School resources refer largely to material resources including funding, buildings, equipment, and materials rather than to key participants as human resources referred to above. For Dalin (1993: 12), one of the 'practical barriers' to innovation in schools is limited resources and one of requirements of CAS is that it may be necessary for schools to allocate some funding to the CAS programme to cover costs such as transport and specific activity materials. (IBO 1992: 7).

School resources is a critical factor in the implementation of CAS because in a mutually adaptive process the school, like the state, also needs to bring its resources to the implementation process particularly in the selection of activities. A service activity involving recording a book on a cassette for the blind implies access to a tape recorder. Another service activity involving assisting informal settlements with plumbing will require specialised tools and equipment.

Evidence of school resources as a critical factor in the implementation process is demonstrated in the cases that follow.

supportive in financing. And in out-of-school activities, if transport is needed, they provide it'.

In the PEUP case, increasing parental involvement in the upgrading exercise was one of its stated policies. (Holderness 1986: 1) And part of the ownership and participation of the programme was overwhelmingly displayed by parents and community in their willingness to support school initiatives for example, by contributing an annual fee of R1 (one Rand) per child, attending 'open days', and assisting with fund raising for classroom upgrading. (Holderness 1993: 1-5)

At SWC the school policy is to keep parents informed of CAS activities and they are invited to help. It is stressed that parent participation, as part of the community, is vital. (Everton 1995: 2) In the case of the Hong Kong International School, the headmaster said: 'For service to work, it is essential to find worthwhile projects in the community. Parents can be useful resources'. (Farmer 1995: 2) Selection of activities may be influenced by the parent community. At SWC 'activities are those requested by the community ...wherever possible'. (Everton 1995: 3)

Where parent involvement by way of support is not present, that may also lead to rejection of the programme as in the case of Veld Schools, when this programme was decreed by the exHOA for implementation in white schools some 20 years ago. That programme was not accepted favourably by certain sections of the community primarily because of ideological differences as Edward (1995: 15) commented when asked:

There was a huge reaction from (white) English speaking schools and they (parents) refused to allow their kids to be indoctrinated.

Thus parent involvement in the school environment is a critical factor in the implementation of CAS.

The school's responsibility is to actively pursue policies which facilitate and value parent involvement as an important resource not only to the school but also in the learner's development. In the case for the implementation of CAS in APSS DC1(G) should this responsibility be forsaken, CAS may not be implemented.

In the case of the CAS programme, IBO (1992: 9) suggested policy for schools encourages the involvement of parents:

Schools might encourage the participation of parents in the administration of, or responsibility for, specific activity groups in a CAS programme.

Making the point that CAS leaders do not always have to be teachers, IBO Asia Regional Director asserts that 'parents often have plenty of free time and special skills and interests which can form a basis for excellent activities'. (Griffen 1994: 1)

Evidence of parent involvement is demonstrated in the following cases.

In the case of Themba, parents in Pimville, Soweto, were the first to support the idea of establishing a private school by sending their children to the make-shift garage of its founder, who went from door to door to visit parents to elicit their support. That moral support together with the continuing support in the form of funding and provision of labour to make school furniture that the founder-headmaster received, ensured the schools continuity and growth. Themba was based in the community and responded to the real needs of the community. (Nkomo 1996: 3)

In the JIS case, parents on the schools' governing board provide all the necessary support needed to teachers. As Caston (1996: 2) pointed out 'they've been very

was trained in Aids education. Students then came up with a scheme to do Aids education programmes within the broader community with the help of the teacher. (Darling 1996: 4)

In the case of Johannesburg International School [JIS], students are actively and directly involved in initiating, rather than passively following particular projects as in the state directed YP programme. For example, a small group of students together with teachers felt that there was a need to provide mathematics tuition to children in a nearby farm school, and some students decided to do that as service. Another student said that he teaches their domestic staff children to swim. From this idea, more students got involved on a voluntary basis and decided to call children from neighbouring farms for tuition in swimming, which the school supported and is now a running project at the school. That is how most of their projects started. (Caston 1996: 3)

The learner, as a key participant is, thus, a critical factor in the implementation of CAS at the school level.

I now turn to the next critical school factor namely parent involvement.

4.2.2.1.4 Parent involvement. Parent involvement is also a critical school factor in the implementation of CAS in APSS DC1(G).

Evidence cited by Fullan (1991: 228) suggests that parent involvement in both 'instructionally' related and 'non instructionally' related forms has a positive impact on learners' personal and academic development. The former occurs when parents are called upon by the school to assist as paid aides or volunteers in classroom or home tutoring, while the latter form relates to participation in school governance and other broader forms of school-community relations.

However, while headmasters provide an inspired leadership and teachers acquire the relevant competencies and are enthusiastic, what is also needed for the implementation of CAS is the active involvement and participation of the learner as a key participant. In the case of CAS, learners are required to select activities according to their interests, not in top-down mode, but in a two-way mutually adaptive process, and to be actively engaged in those activities, with the aim, as stated above, of personal growth and development. (IBO 1992: 4)

Evidence of learners as key participants may be seen in the following cases.

In the case of IBO schools learners who are given the necessary support by the school are active participants in the implementation process in selecting, planning and executing CAS activities. One of the key guidelines to the implementation of CAS is that 'students should be encouraged by their school to propose and plan their activities'. (IBO 1992: 6) CAS programme Co-ordinator Richmond (1991: 1) at the Korea International School summarises her school's CAS policy as follows:

The school policy is very receptive to this student involvement and highly encourages all students to participate in whatever activities suit them. Students are also encouraged to initiate new programmes. In recent years some of these student-initiated activities have been the Model UN, Amnesty International...

Activities are often decided upon in consultation between CAS teachers and learners. At SWC, many of the new community service projects are learner initiated, for example the Aids education project where students decided that they would like to be involved and the school provided the necessary support in terms of workshops on Aids with the help of a staff member who

learners'. (SEA 1995: paragraph 1). And curriculum has to do with teaching and learning activities and experiences provided by schools. (NEPI 1993: 102) The target of these activities and experiences, invariably are focussed on learners as may be gleaned from the aims of several educational projects, for example the Integrated Studies programme at Riverside aims at the 'personal development of the student' (Basson 1993: 25) or the world-wide Child-to-Child programme aims 'to empower children to become involved in real issues'. (Holderness and Altman 1993: 32) The aim and *raison d'être* of the CAS programme too is the personal development and growth of the learner. (IBO 1992: 4)

Not only is the learner central to CAS and other educational programmes, critical to the implementation of CAS is the view of 'the learner as a key participant who is actively engaged in the programme. On the one hand, the learner may be viewed as a passive recipient as in the RD & D implementation strategy where the student/learner is deemed to be a bank, 'where the scope of action allowed to the students extends only as far as receiving, filing, and storing the deposits'. (Freire 1970 in Posner 1988: 90) On the other hand, the learner may be viewed from an 'emancipatory' perspective which emphasises notions of 'critical reflection', 'dialogue' (Freire 1970 in Posner 1988: 90) and encourages learners 'to master a number of critical skills such as thinking skills, problem-solving skills, human relations skills, group dynamic skills...' (Dalin 1993: 21) In the latter sense, the learner necessarily has to be actively engaged in making choices, thinking, communicating, relating to others, learning and growing as in a learning organisation, as Dalin (1993: 21) points out that student learning and growing

can best be facilitated in a positive school and classroom climate with an openness for learning and growth, and with highly competent teachers.

motivation and training through teacher enrichment workshops which were organised and conducted by PEUP staff and which helped to enhance teacher skills and be initiated into a new child-centred pedagogy. Teachers were motivated to become active partners in the implementation process, rather than as passive recipients which gave them a sense of personal growth or empowerment and of commitment to the PEUP programme. (Holderness & Altman 1992: 44)

In the case of GBHS too, because the innovation required new skills in terms of a new creative problem-solving pedagogy 'motivated' teachers were sent to St Andrews College in Grahamstown (a school which had already implemented DT for about 4 years and with which the school had built an association) and the ORT-STEP organisation. Staff also attended voluntarily, rather than by compulsion, training sessions provided by the University of the Witwatersrand to adapt to the new pedagogy involved in DT. (Edward 1995: 5)

Similarly, in the case of IBO, 'IBO Regional Offices regularly organise teacher training workshops which schools are required to support'. (Griffen 1994: 2) These are held so that the teachers who are involved in the teaching of CAS may become more and more competent.

The teacher, as one of several key participants in the implementation of CAS in APSS DC1(G) is, thus, a critical school factor.

4.2.2.1.3 Learners. Another critical factor in the implementation of CAS in APSS DC1(G), within the MA & D implementation strategy is the learner or student/pupil as a key participant.

Broadly, learners are the focus of education. The definition of school refers to 'any institution for the education of learners', where education refers to the 'instruction, teaching or training provided to

in the case of Swaziland World College [SWC]. It was at the invitation and support of the headmaster that Ziglar was called from the UK to implement a community service programme at that school, as Ziglar (1996: 2) explained: 'It happened because we had a headmaster who was ... extremely supportive'.

The headmaster at the local school is, thus, a critical factor in the implementation of CAS.

4.2.2.1.2 The teacher. The teacher responsible for implementation is central to the process as Fullan (1991: 10) argues: 'As implementation is the essence of change, it follows that the teacher as implementer is central'. The teacher is a critical factor in the implementation of CAS at the level of the local public school particularly because in addition to having a supportive and visionary headmaster, committed, motivated and 'competent teachers' (Dalín 1993: 21) are needed as key persons who are to initiate and engage learners in CAS activities, failing which there will be no programme or simply 'nonimplementation'. (McLaughlin 1976: 341) In particular CAS teachers are required to understand CAS philosophy, develop content and engage students and assess learners in accordance with criteria as discussed in the literature review.

In the case of PEUP it is evident that one of the factors that contributed to 'sustainable innovation' (Holderness & Altman 1992: 41) was the ownership of the innovation by teachers, amongst other participants. Here ownership of the innovation as indicated by Holderness and Altman (1992: 42):

is considered to imply that participants gradually take on and adapt the project to their own circumstances; that they are personally involved as individuals in the outcome of the project.

This ownership or commitment came from a process of

mutuality, adaptation and development is required on the side of the state as well as on the side of the school rather than pure top-down imposition or a pure bottom-up process. Evidence also suggests that in addition to the characteristics of CAS as programme and its relevance to the needs of learners and teachers as a critical factor, other critical factors both on the side of the state and the school are also needed in the implementation process. Critical factors on the side of the state are facilitative legislation and curriculum policies at the national, provincial, and district levels, and direct funding support. On the side of the school, critical factors are key participants (headmaster, teachers, learners and parents), and local school resources.

I now turn to the discussion of the findings on the second research question.

sustaining of CAS at existing schools, and the implementation of CAS at more and more schools within the district and beyond. This needs to be done similar to the PEUP experience where a model-satellite implementation strategy was used and where the marketing strategy could be replicated in other districts. After one year's piloting in the 10 selected public schools, additional CAS schools need to be brought on board, by request or persuasion, and the marketing process needs to continue until all of the 38 secondary schools in District C1 have implemented CAS within a period of three years. With more resources added from the state or private sector the process could be accelerated.

Implementation of CAS in a particular school will not be complete if there is no ethos of growth and development of persons involved with CAS activities, particularly teachers and learners. Ongoing INSET will need to be organised and provided by the DD's office and where schools' have the resources they will need to organise their own INSET independently or with the help of the DD. Further, the state also needs to facilitate the training of CAS specialists at tertiary education level as it does for other approved and certified instructional programmes including Guidance, Physical education and other academic disciplines. This would enable teachers to select CAS as a possible career path and further enhance the status of CAS as an important segment of school curriculum.

4.4 Conclusion.

The findings of the first research question indicate that CAS can be implemented in all public secondary schools, District C1, Gauteng by means of the Mutual Adaptation and Development strategy involving a combination of several interactive critical factors rather than by means of the Research Development and Diffusion or Problem-Solving strategies. Evidence suggests that a two-way give-and-take process of

4.3.2.2.6 Development of CAS activities. Having recruited and trained CAS teachers, organised time-tabling and identified potential school resources the next step is for teachers to be engaged in the development of CAS activities. This would involve consulting learners, parents, the CSup, the headmaster and others in the community in a participative process primarily by the relevant CAS teacher on a personal contact basis. Learners themselves must be encouraged to think about possible projects and activities that would interest them.

The range of creativity-action-service activities may differ from school to school as evidenced in several IBO schools. Further, it is likely that different schools in the public sector will implement CAS differently because of the variations in ethos, commitment, location, and /or ability of CAS staff, resources, and attitudes. For a discussion on varying scenarios for implementing CAS, see Appendix E. After developing CAS activities, the next step is engaging learners.

4.3.2.2.7 Engagement of learners. The culmination of the insertion phase is the actual engagement of all learners in CAS activities by teachers as facilitators rather than experts in their respective secondary schools in terms of the pedagogy of CAS. Learners get involved in planning, organising, leading and doing their selected activities and are monitored and supervised on a continuous basis by CAS teachers and supervisors. Finally learners are assessed in terms of performance criteria by learners themselves and their CAS teacher/leader.

Having inserted CAS in 10 Gauteng public secondary schools leads to the next phase in the implementation process.

4.3.2.3 Phase 3: Continuation and expansion. Continuation and expansion involves the ongoing

to plan, organise and develop CAS activities in local contexts and in conjunction with learners and parents as key participants (e) how to engage students in worthwhile activities and (f) how to conduct student assessments. But insertion of CAS is inextricably connected to time tabling.

4.3.2.2.4 Time-table. The organisation of the school time-table needs to be so structured and adapted so as to facilitate student engagement in CAS activities. Each school may have its own time-tabling arrangements rather than having a rigid schedule by imposition. CAS activities could be done during or outside of conventional time-table time after school, during weekends and /or school holidays (Farmer 1995: 2; Moody 1995: 2-3;), as Griffen (1994: 2) affirms: 'timetabling should suit the specific needs of each school'. The NDE curriculum framework needs to set a norm of a minimum of 75 hours per annum or 3-4 hours/ half day per week as is the case with IBO (IBO 1992: 7) but also giving schools the flexibility to adapt time-tabling arrangements as in IBO schools.

4.3.2.2.5 School resources. Appropriate funding and other school resources adapted for the scale of CAS activities need to be organised either from parents, or other fund-raising mechanisms according to the ability and capacity of each school using home-grown techniques such as in the case of PEUP, GBHS, Themba, SWC and others in addition to state support. Funds may be raised through voluntary contributions by parents and donors and also special compulsory fees may be levied on parents in terms of clause 39(1) (SASA 1996). An audit of other available resources including camp sites, persons with special skills, NGO and government service agencies, youth groups, and sports clubs within reach will also need to be undertaken in the school, community and the environment by the local school. These resources would dictate to a large extent the type of CAS activities that will be developed.

evidenced in various IBO schools. The CSup would have the overall responsibility for CAS in the school and would be accountable to the headmaster. The CSup needs to be given 'time-tabled time release' (Falcon 1995: 3) ranging from 2 periods (Moody 1995: 1) to half-time (Ziglar 1996: 6) to plan, organise and administer CAS. The CSup needs to have strong interpersonal and organisational skills and his/her position could be shared as was the case in Jakarta. (Moody 1995: 1) The next step is to draw teachers in as CAS leaders.

4.3.2.2.2 CAS teacher recruitment. CAS teachers (leaders) as key participants will need to be motivated and recruited from existing school staff and/or parents and/or other trained person/s in the area of skill to initiate students into activities, essentially by the headmaster in each school. Each CAS activity needs to have a leader and the number of leaders will vary according to the number of activities in a particular school. No special qualifications are needed, but the leader needs to have knowledge about learners' participating in the programme, have organisational skills, empathy with local community, some fluency in the local community languages (if applicable) and generally contribute according to his/her talents. (Griffen 1994: 1; Moody 1995: 1; Farmer 1995: 2) More importantly, CAS teachers need to have an understanding of CAS, its aims, content selection, pedagogy, and assessment techniques, and its link with the SA context. Training of teachers therefore becomes imperative.

4.3.2.2.3 INSET. Appropriate CAS INSET needs to be arranged with the help of the DD and CIG. Schools may contribute financially towards travel and accommodation costs, and provide time table release for attending training sessions, depending on the schools resources. Such training needs to include (a) Approaches to curriculum design (b) CAS as an activities-based programme - its philosophy and design dimensions (c) the rationale for implementing CAS in the SA context (d) how

embarked upon using one-on-one and group meetings where the implementation of CAS in their specific schools is discussed. Headmasters of the targeted schools will need to be persuaded and their commitment sought to lead the implementation process in their respective schools as leverage at the school level lies with headmasters who are well placed to mobilise the energy of all other key participants in the implementation of CAS. Headmasters therefore need to be carefully targeted, as the PEUP experience indicated. With the assistance of the DD group meetings will need to be organised with teachers, learners and parents with a view to persuading them and bringing them on board. Key participants will need to be shown how engaging in CAS activities can benefit them and the school community, especially in terms of skills and their personal, social and spiritual development, without sacrificing their academic development.

A range of aids and media including videos, pamphlets, brochures and case studies will be necessary and should be used in the marketing of CAS to key participants. This leads to the next critical phase.

4.3.2.2 Phase 2: Insertion. Having established CAS as an official instructional programme, obtained state support and the commitment of 10 schools in District C1 for the implementation of CAS, the insertion phase is concerned with the actual operationalisation of the programme at the local school level which is the heart of the insertion phase. Unless CAS reaches the classroom or learner, there will be non-implementation. The insertion phase would require several interactive steps to be taken by the school, with state support, beginning with setting up of the internal structure at school level.

4.3.2.2.1 CAS supervisor. Noting that the state has the responsibility of providing schools with adequately trained and qualified teachers, a single committed teacher from the existing teaching staff will need to be appointed by the headmaster as CAS Supervisor [CSup] as

Technology programme in all provinces. The funds could be granted from either the education budget, RDP funds, or 'youth budget' (Business Day 27/2/1997) for initial project piloting, documentation in the form of curriculum frameworks and guidelines, co-ordination and INSET at District C1 level. A requisition for this direct funding together with a memorandum on the intended implementation of CAS and motivation therefor will need to be made by CIG to the relevant state department/s setting out detailed requirements on an itemised basis. The control of the funds would be vested in the GDE.

Having secured state approval and limited funding a marketing strategy is now needed to promote the initiation process in all public schools.

4.3.2.1.4 Marketing the programme. Marketing entails strongly persuading and mobilising key participants, particularly headmasters, teachers, learners and parents in District C1 to implement CAS in their respective schools. Spearheaded by CIG, the process needs to begin with the DD on the side of the state to provide the necessary leverage and to persuade key participants to the implementation of CAS, within the constraints of their human and material resources. Face to face meetings will need to be arranged to discuss the issue and strategies of implementation in District C1, Gauteng. Marketing is strongly linked to state support as schools are likely to be reluctant to implement CAS without first knowing about the status of the programme in terms of approval, certification, curriculum and funding support. There needs to be an undertaking between the DD on the one hand to provide potential CAS schools with support in terms of INSET and CAS schools on the other hand to seize the support and training provided by the DD's office.

A process of consultation and persuasion of key participants of the 10 targeted schools will need to be

The first priority task for CIG is to obtain state approval.

4.3.2.1.2 State approval. Having established CIG, the first task is for CIG to obtain ministerial approval for CAS as an instructional programme for placement on NDE's approved list of instructional programmes, as per departmental procedure to be located within the new 'Life Orientation' (GICD undated: 1) group of programmes. If CAS is viewed as a voluntary elective, it may never be implemented. If CAS is neither approved as a compulsory core nor as voluntary elective subject, the programme may perchance be picked up and implemented as an extracurricular course. NDE approval signals the permissibility of implementation at provincial and local school level. CIG has to prepare a proposal motivating the implementation of CAS grounded on its need, rationale, design dimensions, and implementation requirements. A draft guideline for the implementation of CAS including the philosophy underlying CAS, its aims and operating framework should also be prepared by CIG to be submitted as part of the proposal. Implications in terms of funding, development of curriculum materials and activities, both on the side of the state and the side of individual public schools should be spelt out in the proposal.

The proposal should be channelled via the Gauteng MEC for Education, Mary Metcalfe, so that in turn, a stakeholder mandate may be obtained prior to ministerial approval. (Imran 1996: 1) But approval on the side of the state is not sufficient. State financial support will also need to be solicited.

4.3.2.1.3 State funding. In terms of funding, apart from the support that the state provides on a per capita basis in the normal course of events, the state also needs to provide a special direct grant of about R300000-00. The estimate of R300000-00 has been based on the R2million direct grant given for the piloting of new

institutionalisation.

4.3.2.1 Phase 1: Initiation. Initiation refers to the process of starting or launching the implementation process. Practically, initiation is a planning or preparatory phase and needs the following steps to be taken prior to the insertion phase.

4.3.2.1.1 Interest group. As the initial motivation for the implementation of CAS as an activities-based programme is effectively being led by a person/s outside the state schooling system rather than bureaucrats and curriculum experts from within the system as in RD &D, the strategy being suggested here in the initiation phase is that a voluntary, small but powerful, CAS implementation advocacy/interest/lobby/support group [CIG] be established. For the establishment of CIG, face to face meetings need to be held and full CAS documentation and motivation for CAS will be required. Persons to be carefully targeted are key academics, teachers, principals, parents, businesspersons, representatives of organisations including IBO, the National Youth Commission and others who identify with both CAS as a programme and the vision of implementing CAS in SA public schools, to be part of the group as a structured and formally established NGO. Having these persons on board is likely to strengthen CIG's hand in obtaining state support and persuading the first 10 targeted schools to implement CAS.

CIG's sole mission and vision is the promotion of the implementation of CAS as an activities-based programme in all public schools across the country and its broad priority function is to stimulate, persuade and/or pressurise state structures at the national, provincial and district levels on the one hand, and motivate and persuade, rather than coerce local schools and key participants on the other hand to implement CAS, according to their means and abilities.

local circumstances, contexts and resources. Neither does the state develop and impose particular activities nor do Gauteng schools need to simply follow instructions and follow a prescribed syllabus to the last detail as YP. It will not be the responsibility of the state to incur massive upfront funding in researching and developing CAS as is the case in RD & D strategies, as the programme has already been developed and tried and tested by IBO. However, the state may provide curriculum development support in terms of INSET through the DD's office to those schools that need such support.

Clearly because CAS demands creativity from learners according to their own interests and according to the resources available at the local school level, the strategy needed cannot be one of indiscriminate imposition but one that has to take into account the ability of the public school to respond creatively. Local schools need to be given the opportunity, and indeed are given that opportunity by the state to initiate, create, adapt and grow according to both their means and resources.

Thus, the combination of critical factors operate within the notions of mutuality, adaptation and development. But the combination comes together in a definitive implementation strategy or course of action in the implementation of CAS, which is discussed next.

4.3.2 Definitive course of action for implementing CAS.

The definitive course of action marks the coming together of the combination for the implementation of CAS in APSS DC1(G). It entails a three-phase interactive approach namely (1) initiation, (2) insertion and (3) continuation and expansion. Following Havelock (1973), Fullan (1991) and Dalin (1993) these phases are needed in order to take an innovation or change process from its conception to its eventual operationalisation and

relates to the broad funding support for public schools in terms of teacher salaries, provision of buildings, equipment and materials and curriculum support in terms of implementation guidelines and teacher training for CAS. On the other hand, on the side of the schools, mutuality for CAS resides in the ability of individual schools, under the leadership of their headmasters, professionalism of teachers, and involvement of learners and parents to mobilise all its resources and energy including the levying of voluntary and compulsory fees (SASA 1996: S37-41) to implement CAS. The foregoing indicates mutual roles for both the state and Gauteng schools.

Adaptation is connected to mutuality where curriculum and financial support by the state on the one hand and the ability of the school on the other hand to mobilise its human and material resources will depend on strengths and weaknesses in each other. This notion of adaptation is premised on the not unreasonable assumption that there are differences in the abilities of Gauteng schools and in their resources that they can bring to bear in the implementation of CAS. Well resourced schools will not need to draw on the state for additional support in relation to CAS activities but will look to its own resources and internal abilities to raise funds and may well undertake activities that are more cost intensive than poorer schools. The state, in particular the DD, on its side will need to adapt accordingly and provide more curriculum and perhaps financial support to under-resourced or weaker schools than to better resourced wealthier schools.

Both mutuality and adaptation are interrelated also in the development of CAS where development lies with the state on the one hand in providing the curriculum framework with space for innovation for CAS and development on the side of the public school lies in its ability to respond creatively in adapting and growing the CAS programme in terms of activities suited to its

the first research question.

4.3 The implementation of CAS in all public secondary schools District C1, Gauteng.

In response to the research question: How to implement CAS in all public secondary schools, District C1, Gauteng? it is argued that a combination of the critical factors discussed above is needed and that the aforesaid combination entails MA &D. It follows that the response to the research question must also include a definitive strategy or course of action for the implementation of CAS. I will discuss the combination and the definitive course of action for the implementation of CAS.

4.3.1 Combination of critical factors.

The combination of critical factors needed for the implementation of CAS in APSS DC1(G) comprise of the interaction and interdependence of the critical state factors of facilitative curriculum policy and funding support at the national, provincial and district level on the one hand and the critical school factors of key participants, school resources, and CAS, on the other hand. Further, for the implementation of CAS in APSS DC1(G) to succeed, the various critical factors must come together in a combination rather than in isolation entailed in MA &D to impact the implementation process.

On the one hand, the mutuality for CAS in the implementation strategy resides in the facilitative state curriculum policies. These are discerned in the participative process of curriculum development declared by the state (NDE 1994b: 15), the enacted devolution of power to schools (SASA 1996: S21(1)(b)), the general openness to innovative initiatives from inside and outside the schooling system (Viljoen 1995: 1; Imran 1996: 1) and the provision of a broad curriculum framework. Together with the foregoing curriculum policies, mutuality on the side of the state also

1-16) Hahn's vision was to 'produce responsible and active citizens' who would be of service to their communities and be 'fortified against a diseased civilisation' through an education of involving action, experience and service. He provided the leadership to establish Outward Bound Schools world-wide. (Schulze 1972: 5)

The leadership and vision for founding a PBPSS(G) with CAS as its foundational programme will need to be provided personally by the user. The vision in this instance is to establish an independent school as a non-profit, learning organisation in Gauteng where talented but disadvantaged South African children, drawn from its cultural, religious and racial/ethnic diversity could develop an intra-national understanding and mutual respect for each other, and would themselves lead and serve the country in all walks of life including business, politics and the environment. This they would do in a school that provides a holistic education incorporating CAS as a central and foundational programme for their social, personal and spiritual development, at a cost commensurate with affordability.

Leadership and vision is therefore needed as part of the solution to the founding of a CAS PBPSS(G).

5.2.3.2 Support mobilisation for founding a CAS PBPSS(G). Support mobilisation refers to winning the acceptance and gaining concrete patronage and sympathy of relevant stakeholders, meaning those persons (including institutions) who will be most needed, have an interest in, are most likely to identify with, share a common vision, support and serve the project at hand, morally and/or materially. The second factor in the

5.2.3.1 Leadership and vision for founding a CAS PBPSS(G). The first factor needed in founding a CAS PBPSS(G) is leadership and vision. Though these concepts are complex, in this instance leadership refers to the pro-active commitment and intense drive of the user not only in initiating the project but also in being consistent, willing to sacrifice, share and serve. Vision refers to what the leader would like to see happening broadly in society and in institutions, especially to its youth to the extent that a particular project such as founding a school becomes the leader's 'grand passion'. (Kurt Hahn in LBPCP 1995a: 5; Peters: 1989; Covey 1992; Altalib 1991; Senge 1990;) Evidence suggests that a project involving the founding of a school for the purpose of implementing a new programme, can fail if it does not have leadership and vision, and vice versa.

In the case of Themba, Nkomo provided that leadership and vision for his project. He initiated and followed through the founding of a technology school (referring to a school that has technology as a its central programme) despite its massive problems including premises, funding, and an obstinate bureaucracy. He was driven by his vision of an independent school that would prepare black disadvantaged township children for the professions including engineers and doctors through a focus on critical thinking and technology education. (Nkomo 1996: 1-16) A similar pattern can be found in the case of Mu'min Girls High School [MU'MIN] with Dr Asmal leading with a vision for Muslim girls to be educated in a school with an Islamic ethos and also to reach the highest levels in the professions. That school closed after four years, but the project continues as a co-educational primary school. (Desai & Loonat 1996:

purpose resource acquisition strategies. To search and retrieve the variety of issues involved in founding a CAS PBPSS(G), ideas and information need to be gleaned from diverse sources including relevant state policy documents, key persons inside and outside of the state schooling system, persons involved in implementing CAS in IBO schools and in founding private schools such as 'in-house experts', (Havelock 1973: 94) case studies, and site visits. Personal experience in working as a professional auditor and in initiating and managing building projects, and being engaged with youth development projects will also be brought to bear on ideas and information retrieval. Where appropriate, volunteer task teams and professional persons will need to be appointed to do further research as in the case of LBPCP. (LBPCP 1995b: 3)

Having collected data from diverse sources, these must then be analysed to provide the solution needed in solving the problem of founding a CAS PBPSS(G). This leads to the next critical stage of solution in the PS/CF strategy.

5.2.3 Solution for founding a CAS PBPSS(G).

An analysis of the data from the search and retrieval of ideas and information suggests that seven factors are needed for the solution to the problem of founding a CAS PBPSS(G). I will argue for each of these factors as follows (a) leadership and vision; (b) support mobilisation; (c) state legislation and policy (registration, subsidies and state curriculum policy); (d) funding; (e) staff; (f) location; and (g) a support system.

expands and develops.

Particular aspects relevant to the founding of a PBPSS(G) that would need to be determined are: (i) state policy with regard to its registration, funding, subsidisation and curriculum requirements (ii) funding requirements for land, construction, equipment, and operating costs and (iii) administering, staffing, pupil enrolment and community involvement, as evidenced in the cases of MU'MIN (Desai and Loonat 1996); Themba (Nkomo 1996) and Jabula (Pepper 1996), and state policies as evidenced in documents such as SASA, 1996 and SEA, 1995.

5.2.2.2 The CAS programme. As it is intended to implement CAS as a foundational programme of the whole school, rather than as a mere extracurricular or addendum to the academic curriculum, particular ideas and information related to that form of implementation will need to be searched and retrieved as evidenced in the CAS Handbook. (IBO 1992) Issues that are likely to concern the PBPSS(G) are: How will CAS fit into the private school curriculum and how will it affect school ethos and internal policies? What should the ethos of the school be? What time-tabling arrangements will need to be made? What special staff qualifications are needed? What INSET should be provided and by whom? Does CAS need any special location or funding? What type of activities should be engaged in? How should CAS activities be selected?

Having indicated the major issues involved, the matter of how and where the search and retrieval needs to be done also needs clarification.

Havelock (1971: 94-95) suggests a whole range of general

5.2.2 Search and retrieval of ideas and information.

Engagement in a process of search and retrieval of ideas and information as part of the PS/CF strategy is important because ideas will be needed to solve diverse issues including state policies, construction costs and time-tabling in addressing the need for implementing an experiential programme and founding a CAS PBPSS(G). Further it is essential that the project be lead and managed on the basis of informed decisions upfront in anticipation of the issues involved rather than on the basis of crisis management where issues that could have been addressed in the first instance are ignored and surface later plunging the whole project into a crisis. It may be too late then to salvage the school. However, this is not to say that every single issue can be anticipated upfront and that new issues will not arise in the future needing further search and retrieval of ideas and information. At least an endeavour must be made to discern essential requirements before proceeding.

For the purpose of founding a CAS PBPSS(G) it seems that ideas and information around two broad areas would need to be searched and retrieved: (1) Private school establishment and operation in Gauteng and (2) the implementation of CAS as a central and foundational programme of the school. I will discuss these below.

5.2.2.1 Founding of private schools. Founding a PBPSS(G) refers to the whole process from the initial idea through to locating and building a school that would be largely suitable for the implementation of CAS, and operating the school that would have CAS as a foundational programme to continuing that school as it

1972: 5-7; OB Unrated: 1; IBO 1994: ii)

There is therefore a pressing need for experiential learning programmes in the school curriculum to facilitate the personal and social development, alongside the cognitive development of students especially through engaging in activities as demonstrated in the experience of several international schools. One such programme is the Creativity-Action-Service [CAS] programme which has been implemented and tried-and-tested in several hundred schools world-wide and would seem an ideal foundational programme to have within the school curriculum in SA to address the felt need. (IBO 1992: 1; IBO 1994: ii)

While it would be untenable to suggest that CAS would be the panacea for present curriculum problems in the South African context, it can be reasonably expected that CAS, like Outward Bound, will not only contribute to resolving the present bias in content-based school curricula, but also be instrumental in the holistic development of students as emphasised by the advocates of activities-based programmes. (Schulze 1972; IBO 1992)

The problem here then is not concerned with the implementation of a programme within an existing school, as suggested in Havelock's PS strategy, but rather how to implement CAS in a private school where CAS will be the central and foundational programme, in District C1, Gauteng. Following from here, the crux of the problem is: how can CAS be implemented in a PBPSS(G)? Having established the felt need and articulated the problem leads to the search and retrieval stage of the implementation strategy.

pains and indicators suggest a deeper underlying concern: that the school curriculum is problematic.

From an educational perspective, the present school curriculum, particularly in disadvantaged communities in SA, seems to have a strong academic orientation and tends to ignore or pay scant attention to other aspects of pupils' personal and social development including leadership qualities and skills, the abilities to take responsibility, to be creative, and to be actively involved in serving others. The present curriculum is clearly biased towards content-based academic subjects or 'sterile classroom curricula' (Schulze 1972: 1) as evidenced by the plethora of compulsory and elective content-based subjects in the school curriculum (DNE 1994a; NDE 1996a) and in the emphasis on achievement of grades rather than the qualitative personal and social development of students.

An alternative to content-based academic programmes which are likely to contribute to the development of leadership qualities and compassion for others could be found in particular activities-based experiential learning programmes. The latter type programmes have been strongly promoted by educationist/social reformer Kurt Hahn and others such as John Dewey. Both Hahn and Dewey were critical of the prevailing information-transmission mode of school education and argued for an education through 'action and experience'. (Schulze 1972: 7) Hahn wanted an education that presented challenge, strength of character, and the moral and spiritual development of youth as a means of improving modern society and living and personally founded several schools worldwide where experiential programmes are central to the curricula of those schools. (Schulze

implementation strategy across the four major problem-solving stages posited by Havelock by arguing for the (1) diagnosis of the problem (2) search and retrieval of ideas and information (3) solution for founding a CAS PBPSS(G) and (4) the application or course of action needed for the implementation of CAS in a PBPSS(G).

5.2.1 Diagnosis of felt need for CAS and articulation of problem.

Diagnosis of the felt need and articulation of the problem is a critical starting point in the implementation process because it contributes to determining the underlying causes and origin of the problem which helps to explain the need for the implementation of an activities-based experiential learning programme.

The felt need for such a programme arises from intense pain and observation that *inter alia* : (a) the trend of low matriculation and exemption pass rates continues: 43% and 16% respectively for (black) students writing DET examinations in 1995 and (b) almost 49% of South Africa's 4,7 million unemployed persons, translating into a 33% unemployment rate, are young people under the age of 30. (Edusource 1996a: 14) Further, the high crime rate and other legacies and ravages of apartheid such as cultural and racial division is common cause. Moreover, there is a feeling that young people lack the strength of character, attitudes and leadership qualities which would otherwise enable them to serve and make meaningful contributions, as children and later as adults, to the RDP's nation-building projects, to the country, to the aged, to the environment, and to broader humanity. These

specific support to the school including training of teachers, sharing of new knowledge and techniques to enable teachers to become more competent in the implementation of a particular programme. 'Critical' factors refer to the notion of being essential to the success of innovative efforts. (Dalin 1978: 89) And 'combination' of critical factors refers to a convergence of critical factors that operate interactively in concert, rather than independently to enable a project to succeed. (Senge 1990: 6-12) 'Leverage' refers to those actions and changes in organisations that can lead to significant, enduring improvements. (Senge, 1990: 122)

Finally, a 'learning organisation' (Senge 1990: 3 & 14); Dalin 1993: 2) refers to a school as an organisation where every participant, particularly pupils and teachers, continuously learns and grows. This implies that the school is driven by a sense of initiative and creative growth of each participant, hence growing the whole school.

Thus the strategy for the implementation of CAS in a PBPSS(G) involves Havelock's PS strategy, integrated with notions of critical factors. [PS/CF] Together the PS/CF strategy is viewed as a combination of critical factors, which as a composite whole ensures successful implementation.

This leads to the discussion of the implementation strategy in the implementation of CAS in a PBPSS(G).

5.2 The implementation strategy.

I will proceed within the framework of the PS/CF

felt 'needs' denoting the pain, dissatisfaction, concern, disturbance or crisis of the 'user', that is the person feeling the dissatisfaction in the context of the prevailing 'user system' which refers to the prevailing schooling system in which the user finds him/herself. The diagnosis process includes investigating essential details of symptoms, history and possible causes, and essentially defines the problem in words in a problem statement. (Havelock 1973: 63 & 155)

'Solution' refers to the determination of the factors, including funding and state policy needed which would enable or contribute to satisfying the felt need and solving the problem of the user. 'Search and retrieval' refers to researching solution relevant ideas, information, and resources, from both inside and outside the user system using a variety of techniques including key-informant interviews, and gleaning of relevant documents. (Havelock 1973: 78, 83-85 & 155) Further, search and retrieval would contribute to understanding the situation more fully and, more importantly, in determining what would be needed in formulating a solution to the problem. This stage also implies studying implications of various options and generating a range of solution ideas or brainstorming to determine a blue-print or a plan of action. (Havelock 1973: 98-99)

The final stage of 'application' refers to taking a definitive course of action based on the ideas and information gathered in the previous stage to actually implement the solution in addressing the problem. (Havelock 1973: 7, 99 & 155)

Support system refers to the link between a school and an outside organisation, such as an NGO, which provides

In response to the second research question: how can CAS be implemented in a private school, I will posit the argument for an implementation strategy and explain key concepts of that strategy. I will then argue for the implementation strategy comprising of a combination of critical factors for the founding of a PBPSS (Gauteng) where CAS will be implemented as a foundational programme [CAS PBPSS(G)].

5.1 The argument for a strategy for implementing CAS.

I will argue that the implementation of CAS in a PBPSS begins with a specific felt 'need' by the 'user' within the present 'user system'. This process requires clear 'diagnosis' and articulation into a 'problem statement'. It will then be argued that having defined the problem, 'search and retrieval' of ideas and information should be pursued to determining an appropriate 'solution', including an appropriate support system, to the problem followed by the 'application' of the solution. (Havelock, 1973: 7 & 155)

Steps in and factors affecting the implementation process are construed as 'critical' factors (Dalin 1978: 89) and these factors together constitute a 'combination' (Senge 1990: 6) of critical factors. Each critical factor in turn provides the 'leverage' for developing, in this instance, a private school as a 'learning organisation'. (Senge 1990: 3) Accordingly I will argue for this hybrid 'Problem-Solving'/Critical Factor [PS/CF] strategy. (Havelock 1973: 155) I will now proceed to explain key concepts in the PS/CF implementation strategy.

'Diagnosis' refers to the process of understanding the

CHAPTER FIVE: DISCUSSION OF FINDINGS ON IMPLEMENTING CAS
IN A PURPOSE-BUILT PRIVATE SECONDARY SCHOOL IN DISTRICT
C1, GAUTENG.

In responding to the question on the implementation of CAS in all public schools, District C1, Gauteng, it was argued that the MA &D implementation strategy entailing a combination including facilitative state policies and committed key participants, was needed. The strength of that argument is that at best CAS will be implemented in all public schools. The weakness, however, is that CAS may not be strongly and effectively picked up by any public school as intended because implementation in mass education is cumbersome and fraught with multiple problems.

An alternative to the implementation of CAS in public schools is for the programme to be implemented on a much smaller scale in a single purpose-built private secondary school [PBPSS] within the growing private school sector in Gauteng where already over 300 or about 50% (GDE 1996a: 1) of all private schools in SA are located. This alternative should succeed because it is evident that the single private school approach has succeeded in instances where it has been executed on a small scale by persons committed to their ideal. Further, because of the greater freedom, discretion and autonomy enjoyed by a private school to implement idiosyncratic programmes, and the greater measure of control these schools, rather than public schools, may have in the process, it seems plausible to consider implementing CAS as a foundational programme in a PBPSS, as alternative to taking CAS to scale in all public schools, District C1, Gauteng.

PBPSS(G) where CAS is implemented as a foundational programme would need to have a combination of mechanisms as follows:

(i) Initial capital for covering the cost of land, buildings, and equipment would need to be raised from outright grants and donations. A substantial initial financial commitment would need to be made by the leader of the project to set the tone for others to follow. Similar or better outright grants would also need to be sought from close associates and friends. Foreign governments including Libya, Iran, USA, India, and European countries through their funding agencies would need to be targeted because of their known and likely support for projects contributing to the RDP. Development agencies, both local and foreign, including the Islamic Development Bank, African Development Bank, Southern African Development Bank and Independent Development Trust would also need to be approached because of their known willingness to assist in innovative educational projects.

(ii) Endowment Bursary and Scholarship Fund Programme, income from which would be used for the provision of interest-free refundable bursaries and substantial scholarships in due course. Funds for this programme would need to be raised on a continuous basis from projects of the school involving pupils, parents and community; well wishers and targeted donors in the business community including philanthropists and other potential patrons and donors who will need to be carefully targeted through a donor identification and nurturing programme.

(iii) Operating expenditure would need to be raised

1995a: 19-52) Funding is therefore vital in the founding of a CAS PBPSS(G) and it follows that a prudently structured funding strategy needs to be in place, not only for the initial establishment of the school but for its sustained growth.

There seems to be a catalogue of combinations of funding strategies and mechanisms affirmed by various private schools including (a) school fees ranging from nil to as high as R60 000,00 (JIS: Brochures 1995) per annum per pupil (b) voluntary or compulsory contribution to Building Development Fund (c) community and nationwide fund raising campaigns (d) International Aid agency grants (e) foreign government grants (f) private and corporate endowments (g) corporate or church/mosque sponsorship of premises (h) land grants (i) teacher employment on part-time, salary sacrifice, or voluntary basis (k) team of volunteer professionals; (l) commercial enterprise/ tax exempt non-profit organisation. (JIS: Brochures 1995; LBPCP 1995a; Nkomo 1996; Pepper 1996; Desai and Loonat 1996)

Evidence suggests that funding strategies are a function of peculiar goals and circumstances. Themba had to pitch low fees at R50 per month and commenced with 25 children in the founder's backyard garage because that seemed the most viable way to start, given the harsh socio-economic-political situation in Soweto in 1985. In contrast, nobel prize winner and Canadian Premier Lester B Pearson's vision of establishing an International school in Canada providing full scholarship education led to a massive fundraising campaign and massive government grants to house a purpose-built school from day one.

In view of the foregoing, the funding strategy for

PBPSS(G).

Funding is an important factor because in view of current state policy not to pay for the establishment of independent schools, and to grant shrinking subsidies only after a one year trial period, funding will be crucially needed for both capital as well as operating costs. Capital costs here include the cost of acquiring appropriate land, construction of buildings and purchasing of equipment while operating costs include salaries, maintenance and administration costs on an ongoing basis. The quantum of funding needed, however, will clearly depend on the various capital and operating costs that will need to be incurred, and the available sources of funding. Initial estimates indicate that an amount of R5 million would be needed to cover capital costs whereas a per capita amount of R3000 per pupil would be needed to cover operating costs. (Appendix K)

If the school is not sufficiently funded, or if required funds are not in place within a given time frame there is a real risk of the closure as demonstrated in the cases of St.Peters (Dhoola 1996 : 1) and Kagiso College (GDE 1996b: 5) or in the case of MU'MIN where '...because of financial difficulties we had to abandon the idea of a Girls school' (Desai & Loonat: 1996: 2). There is also the risk of a continuous financial struggle which demands unrealistic sacrifices from key persons as in the case of Themba where Nkomo did not receive a salary for four years and where teachers too were often not paid or paid below market rates. (Nkomo 1996: 6) On the other hand, evidence indicates that where a private school's total funding arrangements are firmly in place the risks of closure due to financial problems seem to reduce as in the case of LBPCP. (LBPCP

Critical for the subsidisation of CAS PBPSS(G) by GDE is that the school must (i) be duly registered and operating for at least one year in compliance with registration requirements and (ii) constitute itself as a non-profit organisation. These requirements preclude the school from operating for profit and at the same time tests the commitment of the founders to ensure that the school is not a here-today-gone-tomorrow cas.

Furthermore, assuming the school will inaugurate in 1998, based on current projections the average anticipated subsidy for a secondary school in 1999, one year after commencement, will be as follows:

1996/97 average:	R1755	(GDE 1996d: 1)
1997/98	R1404	(GDE 1996e: 1)
1998/99	R1123	*
1999/2000	R 898	*
2000/2001	R 718	*

(* It is assumed that state subsidies will decrease at the rate of 20% per annum).

While state subsidisation is an important factor that can contribute to the solution of founding a CAS PBPSS(G) much reliance cannot be placed on this source of funding unless there is a change in state policy. However it would be vital to have contingency funding arrangements in place as funding of the school's operations is likely to assume critical proportions in due course. Funding as a factor in the solution is discussed next.

5.2.3.4 Funding for a CAS PBPSS(G). Funding here refers to both the quantum and the sources of funds including state subsidies, donations and school fees in order to meet the anticipated expenditure for founding a CAS

and promote the public schooling system...we do not discourage the establishment of private schools, but we do not go all out to promote them. Our restrictions are mainly financial.

Because of the growth in the number of subsidised private sector schools from 288 to 307 in 1996 (GDE 1996: 5) and the simultaneous cutback in budgetary allocations for private schools from R168m to R128m for 1996/1997 (Edusource 1996b: 5), the per capita subsidies are also plummeting - more schools are having to share a smaller cake. (Kgobe 1996: 5-6) Mu'min Primary School's [MIPS] per capita subsidy declined from R1700 for 1995/1996 to R1395 for 1996/1997 (Desai and Loonat 1996: 15).

State subsidies are directly linked to the registration of private schools. Subsidisation is not an automatically granted right. It has to be specially applied for by registered private schools and is subject to conditions and formulas (SEA 1995: S69(2)(a); National Policy for General Education Affairs [NPGEA] Act, 1984). Compliance of all the abovementioned registration requirements is necessary in addition several other conditions/criteria for subsidisation. These conditions/criteria include (i) constituting the school as a non-profit organisation (ii) annual submission of audited financial statements to the GDE and (iii) the utilisation of subsidies solely for educational purposes. (GDE 1996c: 6) Failure to comply with these requirements could also risk withdrawal of subsidisation of the school as evidenced in the case of several schools losing their subsidies because of non-compliance. (GDE 1996b: 4)

several schools because no or inadequate state assistance was forthcoming. St.Peters Senior College (Dhoola 1996: 1), MU'MIN (Desai & Loonat 1996: 4), and others cited in a recent GDE report are cases in point (GDE 1996b: 5). State subsidies are also critical to the survival of several private schools as evidenced in the recent private school outcry when Metcalf announced a 30% subsidy cut for independent schools (Business Day 6/9/1996) which was later reduced to 10%. (GDE 1996b: 2)

What seems to be clear is that independent schools may be established by any person at his/her own cost. (SASA 1996: S45) This implies that establishment costs will not be borne or subsidised by the state. And the amount of operating cost subsidies presently (1996/1997) range from R702 per pupil per annum to R2106 per pupil per annum depending on class grade/standard of pupil and school 'category' (GDE Circular 8/10/1996: 2) while the national average per capita spend on public schools is R2223. (SAIR 1995/1996: 113 in Kgobe 1996: 5)

The issue of subsidies for independent schools for operating expenditure is presently under review as suggested by the recent report prepared for the GDE which indicates various models for independent school subsidisation. (Kgobe 1996: 13-15) State subsidies are in fact at risk of being abolished in the long term as evidenced in current GDE policy which favours public schooling rather than the growth of independent schools, despite acceptance of the constitutional right of the latter schools to exist as Cele (1996: 2) said in an interview:

The primary responsibility of government which flows from our constitution is clearly to develop, support

1; Carel 1996: 1).

The problem then is how to get CAS approved and certified as a *bona fide* instructional course.

A definitive course proposal would need to be submitted to GDE who in turn will need to obtain (a) a stakeholder mandate, comprising 20 stakeholders including universities, teacher and student groups (b) GDE approval and (c) final approval by the minister of education. (Imran 1996: 1) National or provincial certification by SAFCERT would automatically follow ministerial approval. (Carel 1996: 1)

In the pursuance of founding a PBPSS(G) with CAS as its foundational programme obtaining the approval and certification of CAS as a valid instructional programme is vital. To ensure approval the following will be needed in a submission: (a) the background of CAS including its history, and educational rationale (b) the rationale for implementing CAS in a PBPSS in Gauteng including its potential to contribute to the RDP's nation building and youth development projects (c) The design dimensions of CAS (d) requirements for implementation of the course including materials, teachers, funding, and time-allocations (e) Rationale for CAS as a certifiable course. (Imran 1996: 1; Viljoen 1995: 1)

5.2.3.3.3 State subsidies. State subsidies are linked to both the total funding requirements and the registration of the proposed PBPSS. State subsidisation is particularly important for the survival of private schools in the absence of other substantial funding. This assertion is clearly evidenced in the closure of

Compliance with state registration requirements are therefore crucial in the CAS implementation process.

5.2.3.3.2 Curriculum policy in relation to the founding of a CAS PBPSS(G). Part of the solution in the founding of a CAS PBPSS(G) is that CAS be an 'approved' and 'certified' as an 'instructional programme' (NDE 1994) as CAS is the *raison d'être* for establishing the school. Because it is intended that CAS will be implemented as the foundational programme of the PBPSS(G) alongside the compulsory 'approved curricula' (NPGEA Act 1984) of the school, autonomy and discretion, though vital, to implement programmes alongside the state core curriculum, as granted to private schools (Cale 1996: 1) is not enough. Instead, CAS will also need to be a compulsory approved and certified programme of the school and hence taken seriously as in the case of IBO Schools where it is that CAS students have to meet certain 'performance criteria' (IBO 1992: 4; rather than being subjected to traditional examinations, to be eligible for IB diploma award. (IBO 1993b: 2)

Further, apart from the course being taken seriously, approval by the NDE will also have positive implications in a restructured school curriculum where social and personal development programmes under a new 'Life Orientation' category will be eligible for 'credits' in terms of the impending National Qualifications Framework (NQF). This means that students will receive 'credits' for certain specific courses completed (Vally & Mokgalane 1996: 8-9) and this further implies that it will be possible for students to use the credits obtained for doing CAS towards their General or Further Education Certificate in terms of the NQF. (Imran 1996:

on the ground of race in the operation of the school. (CRSA 1994: 532 (c)) The founding of independent schools is also sanctioned in terms of SASA, in line with the constitution, and subject to certain additional requirements, such as registration with the respective provincial Head of Department. (SASA 1996: Chapter 5)

The position of the Gauteng provincial authorities' is consistent with the national position as evidenced SEA (1995 : S66), but private schools may not be registered by the GDE unless 'prescribed requirements' are complied with. (SEA 1995: S66(2)) Several schools that have not complied with the prescribed requirements were not recommended by their respective DD's for registration purposes. (GDE 1996b: 4) Because of the transformation process of the education system, to date GDE has only 'interim' prescribed requirements which are presently being reviewed. (Cele 1996: 1) These interim measures cover a wide range of requirements including legal, financial, health, curriculum, staff, buildings and broadly matters relating to creating an environment conducive to education, within the law and ethos of the country. It is these requirements that would need to be met for the founding of a private school.

Critical for the registration of the CAS PBPSS(G) is that the school must *inter alia* (i) be built in terms of GDE regulations in terms of space, design and facilities and is duly certified by local health authorities (ii) employ professionally qualified staff particularly the principal and teachers (iii) ensure that the school is financially viable for at least 24 months (iv) implement the state core curriculum, and (v) has a constitution and governing structures in place. (See Appendix F for further requirements).

probably propel cascading support from other stakeholders such as the GDE, targeted teachers, parents, youth organisations, and the business community. The support of the latter would also need to be mobilised with the assistance of a network of associates, primarily in face-to-face meetings, aided with specially prepared aids including pamphlets and audio-visual presentations.

Carefully selected support is needed and should, therefore, be mobilised for the founding of a CAS PBPSS(G).

5.2.3.3 State legislation and policy in relation to the founding of a CAS PBPSS(G). Compliance with state legislation and policy is also needed in the solution for founding of a CAS PBPSS(G) because non-compliance with the law could render persons wanting to establish a private school guilty of an offence and liable on conviction to a fine or imprisonment (SEA 1995: 66(11)) or prevent the school from operating, or enjoying the credibility of a bona fide school and state benefits such as subsidies.

Evidence suggests that there are three particular areas of legislation and policy that will impact upon the founding of a CAS PBPSS(G). These will be discussed as follows (i) registration (ii) curriculum and (iii) subsidies.

5.2.3.3.1 Registration of a CAS PBPSS(G). Broadly, the establishment of a private school has to be sanctioned by legislation. The founding of private schools in SA is a constitutionally protected right, subject to the critical proviso that there shall be no discrimination

founding PBPSS(G) where CAS will be implemented as a foundational programme, is that the user/leader would need to foremostly seek the support of close associates through personal house meetings and presentations of the idea of the project thus establishing home support, similar to Nkomo and Stern. He/she would then need to establish a team of committed persons to take charge of various aspects of the work involved including public relations, legal, finance, and education as in the LBPCP case. (LBPCP 1995b: 3) For mobilisation of support at a wider level, a multi-pronged strategy would be needed at the international and local level. Internationally moral and programmatic support would be needed from IBO and UWCC who have the experience and have been in the forefront of supporting and developing CAS and Outward Bound schools worldwide. The IBO in particular is known to support the idea of founding of an IBO affiliated school in SA. (Hill 1995: 1) A proposal outlining the vision for a CAS PBPSS(G) and enlisting their support would need to be presented to those organisations. Their support is likely to lend credibility and strength to the South African project.

Armed with home and international support, locally the user/leader would need to seek the endorsement of key persons such as President Nelson Mandela who is also the President of the UWCC (The Star 15/3/1995); and other influential officials known to the user/leader, such as Ahmed Kathrada (a presidential advisor), with one-on-one meetings. The support of these persons is likely to be mobilised because they have an interest in projects that synchronise with government's RDP ideals of reconciliation, nation-building and youth development. More importantly, their support is likely to provide further credibility to the project and will most

founding of a CAS PBPSS(G) is for the leader/user to mobilise the support of relevant stakeholders because without their support, especially in a democratic environment, it is unlikely that the project will succeed. Further, inadequate initial support from stakeholders may be an indicator of non support later, which in turn may well lead to the closure of the school and the failure of the project.

Evidence of support mobilisation of various stakeholders in diverse ways may be discerned in several cases. Nkomo called several meetings to talk to parents to solicit their support for his vision of an alternative school for their children, given the socio-political circumstances prevailing in the township and the country around 1985. Along with a dedicated team of parents and teachers, and broader support of certain businesses, development agencies and NGO's he ensured the continuity of the school against all odds, even when the school faced closure. (Nkomo 1996: 5) In the case of MU'MIN Dr Asmal mobilised a team of committed persons and called up several meetings with educationists and other interested persons to marshal support for the founding of an Islamic school. However, its closure at the end of 1993 was attributed to *inter alia* 'insufficient support from the parents'. (Desai and Loonat 1996: 1) Michael Stern mobilised initial support from close friends and later from international agencies to help found and support SWC. (Linden 1983: 11). Kurt Hahn founded his first Outward Bound School in Aberdovey, England where he found a climate responsive to his educational ideas' (Schulze 1972: 5) indicating tacit support for his project.

The support mobilisation strategy in the case for the

Several specific interlinked issues related to the founding of a CAS PBPSS(G) would need to be brainstormed, deliberated and resolved by the various volunteer committees to develop a master plan of action including: (1) Mission and vision of the school which in turn would impact on school internal policy, rules and regulations. (2) a non-profit NGO or a company for profit which will determine whether the school can raise endowments and donations, which in turn is likely to influence the amount of fees to be charged. It is unlikely that a company for profit will be able to set affordable fees for pupils from disadvantaged backgrounds. (3) Target student population and enrolment as this issue is likely to impact on fundraising, location, number of teachers to employ. Funders may be reluctant to donate funds if the school is targeted at other than historically disadvantaged communities. (4) School ethos, policies, and school curriculum. These would need to be consistent with the aims of CAS and GDE requirements. (5) CAS administration, activities, time tabling, funding, INSET, development of CAS manuals/guidelines for teachers and administrators, determining and planning for appropriate support structures to ensure that the programme is well managed and operated. (6) School governance structures and management responsibilities to ensure that the school is managed with the broadest possible participation and involvement and with the necessary expertise. (7) Budgets and business plans to plan the financial requirements of the school in the short and long term so that problems may be identified at the appropriate time. (8) Staff recruitment, selection, appointment to ensure that the calibre of staff needed are the ones appointed, and staff training to ensure that they understand the

stakeholders and supporters, making the project a team effort, rather than a one person show.

An organisational structure would need to be set up with an elected leadership comprising of a chairperson, treasurer, secretary and perhaps four other executive members, and with clear lines of authority and delegation of functional responsibilities. In particular volunteer committees responsible for specific tasks would have to be established from among committed supporters. These committees should include: support mobilisation and public relations; finance and fundraising; legal and tax aspects; curriculum, school policy and support systems; staff recruitment and selection; site location and development; and marketing and pupil enrolment to take care of the various aspects of the founding of the CAS PBPSS(G).

5.2.4.2.2 Policies and action-plans. A major initial task of each of the committees will be to further search and retrieve solution-relevant information that will help in formulating specific policies, strategies, and action-plans for aspects of the project that would culminate into a coherent, integrated combination of the whole CAS PBPSS(G) project where no detail is omitted.

A voluntary secretariat should be set up for this purpose to assist with co-ordinating and compiling data which needs to be collected from disparate sources, including the GDE and specialised consultants such as architects, quantity surveyors, accountants, lawyers and educationists. A cost-effective way to obtain much of the data is to have such consultants serving on the voluntary committees as part of the overall team as was done in the LBPCP case. (LBPCP 1995b: 3)

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and support for the project and to listen to objections and problems. Local print-media advertised meetings would also need to be held in those areas for preliminary discussions as part of a process of involving interested persons from the outset. An explanatory document/ brochure highlighting the problem would need to be prepared setting out the vision and aims of the school and circulated to key persons in the community inviting critical comment as part of a democratic process. The purpose for this initial process is to articulate and deliberate the vision of the 'grand passion' of the project and to establish that the felt-need for CAS and a PBPSS(G) is not only a personal one but that of a broader community.

If this initial testing of the waters indicates that the project does in fact have potential grassroot and wider support, it would mark the end of the initiation phase and the beginning of the next phase in the founding of the CAS PBPSS(G).

5.2.4.2 Phase 2: Organisation. Having gained a sense of initial support for the project, the focus of leader/user must now be directed at resolving the problem in an organised way. This would involve setting up of appropriate organisational structures and the development of master and specific action plans geared for delivery.

5.2.4.2.1 Setting up structures. The next step then is to move towards building an organisation that will ensure that the project reaches fruition. The leader/user now has to focus on mobilising key stakeholder support driven by his/her leadership and vision to obtain the commitment initially of a core of

including matriculation results, unemployment, crime and racism, and the scourge of drug abuse among youth in South African society. These concerns should then be intimately discussed with close family, friends and associates to gain acceptance, sympathy and commonality.

To establish the underlying causes of the felt pain from an educational perspective, academics and curriculum experts inside and outside the school system must then be consulted. Once the cause is affirmed with the help of more experienced persons as the imbalance in the present school curriculum, the need for experiential learning programmes complementing the academic school curriculum would need to be addressed. In particular the option of tried-and-tested CAS as a viable activities-based programme to address the felt pain would need to be discussed and their support obtained therefor. A presentation using audio-visual aids of CAS as programme and its potential to contribute to alleviating pains should be made so that at this early stage local educationist support can be obtained. And having established CAS as the definitive programme, the next issue that would need to be settled is the articulation of the problem: How to implement CAS in a PBPSS(G), given that other options may not be feasible.

From the initial supporters a small steering committee would need to be established to pursue preliminary work in the implementation process. At this stage a small investigative random opinion survey of stakeholders would need to be done to sound out sympathy and support for the project. Small group discussions in targeted communities in Lenasia, Eldorado Park, Soweto and Johannesburg South on the issue of establishing a CAS PBPSS(G) should be organised to broaden the awareness of

had several years of CAS experience would need to be made by personal visits and/or correspondence. These schools or organisations may include the SWC, JIS and further afield the IBO which regularly holds workshops and provides training and ongoing support to IBO affiliated schools.

Having discussed the seven factors needed as a result of search and retrieval for a solution to the problem of founding of a PBPSS(G) with CAS as its foundational programme, I now turn to the final application stage in the PS/CF implementation process.

5.2.4 'Application' for founding a CAS PBPSS(G).

The application as the course of action in the founding of CAS PBPSS(G) within the PS/CF strategy. The application stage ensures entry of the PBPSS(G) into the broader schooling system within the country. Application for the implementation of CAS in a PBPSS(G) involves five interactive phases. I will discuss each of the following in turn: (1) Initiation (2) Organisation (3) Establishment (4) Insertion and (5) Continuation and Expansion.

5.2.4.1 Phase 1: Initiation. The initiation phase involves all the necessary planning and preparatory tasks for founding a PBPSS(G) with CAS as its foundational programme.

The planning task begins with diagnosing, as indicated in the experience of others, and begins with the pain felt in the user system. A self-diagnosis would first need to be made by articulating and documenting the dissatisfaction and concern of the multiple problems

Themba, where the school linked with ORT-STEP to provide training and support for their Technology education to teachers, although ORT-STEP's own technology college recently merged with Themba. Because technology became the central focus of the school, it linked to an external organisation which continues to be in the business of providing technology education programmes, training and supporting schools and other institutions implementing their programmes. But Themba was also linked to exDET for state core academic curriculum, although minimal support was forthcoming from DET quarters. (Nkomo 1996; OSI 1997: 1) In the case of MIPS, the school contracted an outside resource person, Moulana Ahmed, to train and support Islamiat teachers, as that expertise was found wanting in a school that had Islam as its foundational programme. MIPS' membership with the Association of Muslim Schools also provided it with ongoing support and training through workshops, and visiting lecturers. MIPS was linked to exHOD and students wrote exHOD examinations. (Desai and Loonat 1996). Jabula relied on Pepper, an educationist, for curriculum materials and ongoing advice and was linked to the ex Lebowa Education Department (now Mpumalanga) for its broad support in terms provision of teachers and accreditation of examinations. (Pepper 1996)

The above cases clearly suggest the need for a support system when the resources are not available within the user system in the school. In the case for the founding of a PBPSS(G) where CAS is a central and foundational programme, it is envisaged that an association be forged with experienced organisations for providing CAS PBPSS with the necessary back-up and support to implement the programme as intended. A pro-active strategy of contacting possible schools and institutions which have

the prospective school were to be an IBO affiliate. (IBO undated (b): 1-2).

A survey of possible sites would need to be made based on particular criteria including as size, physical environment, cost, access, and suitability for CAS activities. It seems that an ideal site for the location of the CAS PBPSS(G) would be in the Klipriviersberg area. This siting would be suitable in terms of the aforementioned criteria. Klipriviersberg is within the heart of densely populated townships and suburbs, yet outside the concrete and coldness of the city, and close to nature conservation areas, hospitals, old age homes and informal settlements that would lend itself to CAS activities. These activities could include working on creating endangered wildlife or flora farms in conjunction with the nearby Klipriviersberg nature reserve; serving patients and professionals in the nearby Chris Hani Hospital; assisting in self-help/self-reliance projects such as food gardens in nearby informal settlements and townships or engage in shadow jobs in the nearby industrial and office complexes.

Location as part of the solution for founding a CAS PBPSS(G) is an important factor and I now proceed to discussing the final factor.

5.2.3.7 Support system for a CAS PBPSS(G). A support system, such as an NGO, is needed because it provides a link between teachers at the school level with other resource persons/centres outside so that they may receive adequate training and support in the implementation process.

The need for a support system was evident in the case of

transcending racial, religious, cultural and national barriers among 200 students drawn from 75 countries who live, study, play, and serve together. Many of LBPCP's CAS activities such as Coastwatch, Marine Radio, and Scuba Diving are ideally suited for that particular location. (LBPCP 1995b: 23)

Part of the solution for the establishment of a PBPSS(G) where CAS will be implemented as a foundational programme will be its location, especially in terms of easy and affordable access. This is so because it is envisaged that the targeted pupils of the school will be drawn primarily, though not exclusively, from previously disadvantaged communities living in and around Soweto, Eldorado Park, Lenasia, and Johannesburg South. More importantly the location would need to be close to the communities, projects, and institutions to lend itself to and advance the school's mainstay of CAS activities including environmental, self-help/self-reliance and service projects. The physical environment of the school would need to be large, rustic, scenic, with abundant open spaces, rather than a closed and inhibitive one. This is to engender a serenity and harmony that facilitates and fosters creativity, action, challenge and service in the community through the CAS programme, and in the academic curriculum, as in the case of LBPCP and various CAS and Outward Bound schools internationally, for both teacher and pupil. (Opie 1989; IBO 1992; Schulze 1972)

It should be noted that IBO does not have any particular criteria with regard to locating schools except for compliance with IBO aims, school ethos and policy which are underpinned by the promotion of 'international understanding' amongst diverse people and cultures, if

A staff committee would need to be established to (i) oversee the selection and placement of the school staff according to various criteria including the aforementioned and broadly taking into cognisance the needs of the CAS PBPSS(G); (ii) determine appropriate INSET policies and programmes to initiate and orient staff to the ethos and vision of the school and encourage the ongoing growth and development of personnel.

Staff with the aforementioned characteristics are vital in the solution for the founding of a CAS PBPSS(G).

5.2.3.6 Location of a CAS PBPSS(G). Location refers to the particular siting of the school to serve specific purposes. Location is an important factor broadly in view of the particular nature of the school, its target market or feeder area, and also because the mainstay or thrust of the activities of that school.

Location as a factor is demonstrated in several cases. MIPS is located in the heart of its target market in Lenasia and also within an Islamic Centre which blends into the school's ethos and activities. Themba relocated to Johannesburg from its original site in Pimville, Soweto because it could better serve its target market in an environment more conducive to learning and teaching. Johannesburg also seemed to be a better venue than Soweto for Themba because students could relate better to technology as the main thrust of the school's curriculum there. The LBPCP is a boarding school located on the west coast of Canada, modelled on the UWC of the Atlantic which is also coast-based. Its particular location was desired by its founder to serve the aim of

objectives of the school. Their perception was one thing, and ours was another.

On the other hand, evidence indicates that staff who are committed to the ideals of the school, learn, grow and contribute to the endurance and richness of the school. Staff at LBPCP who continuously improve their qualifications and hold higher degrees including Ph.D's and M degrees, seem to be fully committed and engaged in the school's CAS programme as evidenced by the additional responsibilities taken by them over and above their academic teaching tasks. The Mathematics teacher is also responsible for Coastwatch activities or the Spanish teacher is also the Service co-ordinator. (LBPCP 1995b: 9-14)

Staff for a CAS PBPSS(G) would need to be committed to the project and share the vision and 'grand passion' of the project with the leadership of the school and to mediate that vision and passion to students. Staff would also need to be role models of creativity, action and service. They would need to have the values of understanding and mutual respect to practise and share with their pupils; skills for developing, planning and organising CAS activities; and certain specialised skills including self-reliance and first aid. Staff would also need to be rewarded commensurately by the school for their additional efforts and time sacrifices. The principal, as leader of the school (as opposed to the user/leader) will need to have a clear long term vision of CAS and the school, and need to be willing and able to mobilise the energy of all the key participants, in a team effort, in the school community towards that vision in building and growing CAS PBPSS(G) as a learning organisation.

primarily from school fees commensurate with affordability, and especially during the first year supplemented with other fundraising efforts including special events such as concerts, fetes; renting of school space for business conferences and conventions, community functions; and School holiday fee paying courses for school children and the general public. Income from the endowment fund would contribute significantly to operating expenditure in future years.

For the foregoing strategy to be implemented a professional fundraiser would need to be employed to tap all possible sources of funding, as in the case of several NGO's. A fundraising team made up of the leader/user and other supporters would also be needed.

5.2.3.5 Staff for a CAS PBPSS(G). Another factor which would be needed as part of the solution in the operation of a PBPSS(G) and the implementation of CAS within the context of a learning organisation is the appointment of key staff, particularly the headmaster and teachers.

Staff who do not understand the vision and ethos of the school and of CAS, are likely to cause the school to fail in its broad goals. This failure was amply demonstrated again in the case of MU'MIN. In reviewing the reasons for the closure of MU'MIN, one critical factor cited by Desai and Loonat (1996: 8-9) when interviewed was that apart from certain teachers, including the headmaster A. Barakallah, who held the school together and understood the concept of an Islamic school,

the majority of the teachers (and parents) were themselves not clear about the mission, vision and

whereas the state would provide a curriculum framework, the school would pursue the development of activities according to local contexts and circumstances.

Evidence also suggests that there are several interactive critical factors that function within the MA &D strategy. These specifically refer to state facilitative legislation and curriculum policy at the national, provincial and district levels, and funding support on the one hand, and the contribution on the side of the school by key participants and of school resources to the implementation process. The study indicates that the characteristics of CAS as programme in satisfying teacher and student needs is also critical to the implementation process. With the recent passage of the National Education Policy Act, 1996, the South African Schools Act, 1996 and the development of new curriculum policies, a new openness to involvement and participation of stakeholders has emerged resulting in an ethos of empowerment at the level of local schools. But, as the study indicates, critical to the implementation of CAS is that the headmaster, teachers, students and parents as key participants also bring their commitment, creativity, participation and active involvement together with the combined state-school-community resources which they are able muster, to the implementation process. It is thus the combination of critical factors entailed within the MA &D strategy that is needed in the definitive course of action for the implementation of CAS in all public schools, District C1, Gauteng.

two research questions followed by a general concluding discussion of the study is presented below.

6.1 Discussion of research question 1: How can CAS be implemented in all public secondary schools, District C1, Gauteng?

The argument for the implementation strategy for implementing CAS in all public secondary schools, District C1, Gauteng rests on the case for a two-way process rather than a one-way pure top-down power-coercive strategy or a pure bottom-up strategy involving a cluster of interactive critical factors in a combination. The implementation of CAS requires that both the state and the school are involved as partners in the process rather than the state alone in an authoritarian fashion.

Evidence suggests that CAS can be implemented in all public schools, District C1, Gauteng using the Mutual Adaptation and Development (MA & D) strategy, in contrast to the RD & D strategy where massive upfront funding is needed and where curriculum is implemented by imposition, or in the PS strategy where teachers may go it alone. Central to MA & D is the mutuality which involves accommodation and give and take on the side of the state as well as on the side of the school. The state adapts its curriculum support, including INSET, and funding support according to its own strengths and weaknesses and similarly individual schools' adapt the implementation process according to their own strengths and weaknesses. Where schools have abundant resources and strong abilities to implement CAS, there is less reliance on the state for financial and curriculum support, and vice versa. In terms of development,

CHAPTER SIX: CONCLUDING COMMENTS AND DISCUSSION.

The research problem in this study focused on the implementation of CAS as an internationally tried-and-tested activities-based programme within the mainly content-based curricula of SA schools to develop abilities, values and attitudes needed in the current era of transformation to democracy and as a contribution to the reconstruction and development programme here.

The broad problem of implementation addressed here is the issue of how to get CAS into SA schools with the consent and support of stakeholders in line with the current transformation and without imposition and power-coercion, as was the case during the apartheid era. Thus, the study focused on implementation issues rather than on the design or evaluation of CAS.

Implementation has been viewed in the literature as a complex process of putting a programme into practice. This notion of implementation has been affirmed in this study. Unlike the installation of pre-packaged computer software, the problem of implementing CAS involves several interactive critical factors including motivating and obtaining the support and commitment of the state, funders, community and key participants. Moreover, a feasible implementation strategy entailing a combination of critical factors is needed for the implementation of CAS for different contexts and situations in SA.

As a front-end analysis of the implementation of CAS in SA schools, this study investigated two research questions, being two of several implementation possibilities. A concluding discussion on each of the

developed to synchronise with the implementation of CAS; links with the community, business and institutions also need to be built with the view to implementing CAS activities.

The application phase as part of implementation process beginning from felt-need firmly positions the PBPSS(G) within the broader education system.

5.3 Conclusion.

The findings of the second research question indicate that CAS can be implemented as a foundational programme in a single purpose-built private secondary school, Gauteng as alternative to implementation in mass education, using a structured problem-solving/critical factor [PS/CF] strategy. Evidence suggests that the PS/CF strategy is essentially driven bottom-up and focuses on actually addressing real felt needs of users dissatisfied with the present user system. Central to this PS/CF implementation strategy are the various critical stages beginning with the diagnosis of user felt needs and articulation of the problem, followed by the search and retrieval of ideas and information, finding a solution, and finally proceeding with the application of the solution. The application stage brings the project of founding a purpose-built secondary school with CAS as its foundational programme to fruition through a definitive course of action.

progress of his/her project. These records should be available to the CAS Supervisor for review.

Student assessment completes the insertion phase at least for the first year of operation and leads to the next phase of the implementation strategy.

5.2.4.5 Phase 5: Continuation and expansion of CAS PBPSS(G). The continuation and expansion phase refers to the ongoing growing and development of the CAS PBPSS(G) both quantitatively and qualitatively. The former includes increasing the school's capacity by building additional classrooms to meet the anticipated expansion of the school, increasing pupil and teacher numbers as planned, increasing the facilities especially with regard to existing and more CAS activities, increasing the Endowment and Bursary Funds, and growing the financial and general supporter base of the school, as the school grows and develops.

On the other hand, the latter involves the continuous growing, maintaining, and developing of the CAS PBPSS(G) and its policies as a learning organisation and includes the encouragement of all key participants including headmaster, teachers, pupils, and parents to learn, grow, and share the vision and mission of the school. For this purpose appropriate INSET will need to be arranged with support organisations; the CAS programme will need to be further enriched with more and more creative activities alongside the academic curriculum; key stakeholders will need to be kept informed of school developments and finances and a close relationship will need to be nurtured with the mobilised support base and support system through newsletters and meetings; school policies and ethos need to be continuously reviewed and

alternative activities and the implications of those activities in terms of resource and time requirements. It should include time for planning and organising the activity and then for execution.

The design dimensions of CAS and the process curriculum model on which CAS rests should be borne in mind when offering guidance to learners. A suggested range of activities will need to be included in the CAS teacher's manual as a guideline.

5.2.4.4.5 Assessment. The culmination of the insertion of CAS into the PBPSS(G) is in the ongoing monitoring and assessment of student growth. Unlike in the behavioural objectives model, CAS performance is not aimed at grades but personal development. As Farmer (1995: 2) asserted:

Students are encouraged to assess themselves - in terms of balanced interests and personal growth...Each school develops its own format for monitoring student involvement.

In the case of CAS PBPSS(G) a personal diary system which would include a critical and frank self-assessment of the student's particular project or activity should be maintained. The CAS teacher/leader should observe student participation and behaviour and maintain records of the student's performance in terms of laid down performance criteria including obtaining evidence of initiative, commitment, attitudes, values, skills, planning and organisation to assess student personal achievement, public exposure, prize winning, and selection for leadership positions. Regular conferences or discussions should be held with students to assess

form of transport costs and/or special materials or equipment. Because of the schools actual location, and the availability of public transport to nearby destinations, activities would primarily be defined by such constraints. However special transport and equipment sponsorships may be solicited from nearby companies from their social investment budgets by making face to face presentations and by bringing potential sponsors to the school.

Having made an assessment of school resources the next step is to plan and execute CAS activities.

5.2.4.4.4 CAS activities. Noting the role of CAS teachers as facilitators rather than experts, learners would be engaged from the very outset in thinking out and planning CAS activities which are never imposed but draw heavily on student interests. Focus is on the key words of the programme: creativity, action and service and it must be clear to students of what is expected of them and why individually or in groups. CAS teachers may give students examples from previous experiences and others' accounts of the activities they engaged in.

Activities need to be commensurate with affordability and within the context of the schools special location and resources. But this is where the challenge lies. It is not just a question of selecting from a menu of activities. CAS teachers will instead need to offer guidance in terms of the criteria for selecting activities for example that active rather than passive roles be promoted in CAS activities.

The programme should include time for individual and group research, thinking and discussion of potential or

service activities as well as a combination of individual and group, indoor and outdoor activities within at least 75 hours per annum.

Supervision of students outside of time-table time might have funding implications but in many instances, as in JIS, teachers volunteer their services (Caston 1996: 4) which is an indication of their commitment and dedication to CAS activities and the school. When teachers are employed outside school time-table time, CAS commitments need to be discussed with them and built into employment contracts.

Preparations for insertion will also need an assessment of school resources.

5.2.4.4.3 Assessment of school resources. Prior to the determination and engagement into specific CAS activities, a thorough assessment of school resources should be made as it is held that all schools have an enormous potential wealth of CAS resources within reach, which a careful audit of the school, the local communities and the environment will reveal. (IBO 1992: 13) In particular the specific location of the CAS PBPSS(G) should be carefully assessed for its potential as a resource for CAS activities. The CAS Supervisor should also have a profile of parents, staff and spouses to determine the skills available. Similarly student special skills such as in arts, music, sports may also be harnessed. A directory of potentially helpful organisations within reach should be compiled for example the SPCA, environmental groups, student job placement groups, and potential funders of activities.

Specific funding for CAS activities may be needed in the

prior to the opening of the school so that adequate training may take place. The CAS Supervisor maintains a close link with the CAS support system outside the school for example IBO, the community and the Board of Directors of the school. The CAS Supervisor is accountable to the headmaster, understands and is deeply committed to the vision and mission of the newly founded school. The CAS Supervisor involves him/herself in all facets of CAS - planning and co-ordinating of activities collaboratively with teachers and students, assisting with transport and making contacts with outside agencies, training of CAS teachers, and also in the assessment of students according to established criteria.

CAS teachers/leaders are accountable to the CAS supervisor and as key CAS staff they will be directly responsible at the level of engaging students individually or in groups into CAS activities. CAS teachers/leaders will therefore also need to be appointed for specific activities.

As part of the organisational structuring for inserting CAS in a PBPSS(G), the time-tabling will need to be carefully set up.

5.2.4.4.2 Time-table. Because it is envisaged that CAS will be a foundational programme of the PBPSS(G) and one that has been approved by the state as an instructional programme, the time-tabling strategy would need to accommodate that status quo. CAS activities would need to be part of both during and outside of the time-table including after school, weekends and school holidays. (Griffin 1994: 2). This is to facilitate the inclusion of the three categories of creativity, action and

staff recruitment and training particularly those to be engaged as CAS supervisor and as CAS teachers/leaders. (iii) Marketing of the CAS PBPSS(G) to attract and enrol learners as clients of the school in the targeted communities. (iv) Preparation of CAS training manuals and guidelines for teachers within the context of CAS philosophy and curriculum framework, school location and resources. (v) Establishment and documentation of school ethos, policies, rules and regulations. Where needed the support system will need to be engaged to provide concrete assistance.

By December 1998, all aforementioned aspects in relation to the establishment of the CAS PBPSS(G) will need to be completed at least to cater for the initial intake of learners so that the project can proceed into the next phase of the implementation process: Insertion.

5.2.4.4 Phase 4: Insertion. The insertion phase here refers to the actual operationalisation of the whole PBPSS(G) with CAS implemented as the school's foundational programme. The further steps to be taken to insert CAS in the PBPSS(G) are discussed below.

5.2.4.4.1 Organisation for CAS. Organisation here refers to the appointment of key CAS staff within the school. Apart from the headmaster of the school who may also be the user/leader of the school project as a whole, the person who will be directly responsible for the process of insertion of CAS is the CAS Supervisor. The CAS Supervisor will need to be appointed for the school as the central co-ordinator of all CAS matters in the school including the provision of support inside the school. (Farmer 1995: 1; Moody 1995: 1; IBO 1992: 6) In the case of CAS PBPSS(G) this appointment may be done

local donor donations to the project. The school needs to apply for GDE registration at this stage on the basis of completed architectural designs and clear ideas of the curriculum plans. The process of obtaining approval and certification of CAS also needs to be commenced at this early stage and CAS support system arrangements formalised with relevant parties including IBO and SWC.

Because the establishment of the entire project and its continuity is critically dependent on funding, the fundraising effort will need to be put into top gear right at the outset given the time-consuming and often lengthy process involved in raising the initial R5 million establishment cost and R7 million Endowment Fund requirement over the ensuing 3 years. (Appendix K) Until such time that sufficient commitments and/or guarantees are received from potential donors to cover establishment costs, the potential site may not be purchased by the directors of the proposed school nor can contracts for construction work be awarded. The initial capital funding arrangements need to be in place within a period of six months, say by December 1997, so that construction can commence in January 1998 and the minimum building requirements for say a 100 pupil intake can be handed over to the directors by September 1998. An ongoing activity however needs to be the raising of funds for the Endowment Bursary Fund to meet operational expenditure budgetary targets.

Based on the assumption that the school will start operating in January 1999 several establishment actioning needs to be taken at least by September 1998, about 4 months prior to the opening of the school. (i) Procurement of curriculum materials and equipment for delivery prior to the opening of the school. (ii) Key

school ethos and know the operation of CAS. (9) Location and school building architectural plans so that the siting and architecture is in keeping with the affordability, accessibility and lend itself to CAS activities. (10) Equipment and curriculum materials required for the school curriculum including CAS. (11) Funding and related strategies for example fundraising for capital expenditure and endowment funds or the determination of the level of parent contribution with reference to school fees. (12) Registration of school, obtaining subsidies, obtaining approval and certification of CAS as an instructional programme.

Having built up an organisation, deliberated relevant issues and taken several key decisions with definitive action plans, leads to the next phase of establishment.

5.2.4.3 Phase 3: Establishment. The establishment phase refers to actioning all the plans and strategies of the various volunteer task committees. In the case for founding a CAS PBPSS(G) certain actioning will need to take precedence over others, certain actioning will need to be done parallel with others while certain actioning will need to follow others as is traditionally done in a variety of project management activities.

Prior to any establishment activity, some of which may involve acquiring legal rights and obligations to third parties, the necessary corporate, taxation and legal requirements will need to be put into place. In this regard a section 21 Company (not for profit) will need to be formed in terms of the Companies Act, and all tax exemptions in terms section S18 of the Income tax Act must be officially obtained to exempt the school from paying taxes and to facilitate tax deductibility of

questionnaire which IB schools are required to complete for monitoring and evaluation purposes). *

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thinking. Implementation strategies that embrace notions of mutuality, adaptation and development rather than imposition, and that address felt needs, synchronise with these new tendencies and are likely to succeed in bringing about educational change.

secondary schools account for more than 500 000 students. (Edusource 1995a: 7; Edusource 1996b: 4). Implementation in a private school implies limited outreach and long time periods for establishment as shown in Themba which has an enrolment of 150 students after 10 years of struggle, and MIPS has 300 students after 5 years. The single private school envisaged in this study may cater for only 600 students. The decision as to which option is the better way to proceed, however, needs further investigation.

(2) Apart from the two possibilities of implementing CAS investigated in this study, insights gained from this study opens other opportunities for investigation and implementation. These include implementation of CAS in a single or cluster of existing private schools, or in a single public primary or secondary school. A real case that has presented itself recently is one where the headmaster of a single public primary school in Lenasia invited me to assist with the implementation of CAS in his school. I intend to investigate and pursue this possibility in due course especially because the initiative has come from the headmaster personally rather than from an outside pressure group.

(3) This study has given insights into the broad problem of implementation in addressing the how of bringing about educational change in different educational settings in South Africa. It seems that because of the fundamental transformation to democracy, the shift in curriculum thinking in terms of the process model of curriculum design, and recently in terms of the new outcomes-based learning, the way in which educational programmes are to be implemented in SA will also be informed by that transformation and shift in curriculum

where the thrust comes from a committed leader working with a dedicated team of people who share a common vision. Other issues evidenced in the study included support mobilisation, funding, state subsidies, registration of the private school, state approval of CAS as an instructional programme, key staff requirements, location of the school, and support systems needed for the implementation of CAS in a private-school setting. The study suggests appropriate strategies for solutions to the various issues. The application stage spans several phases including initiation, establishment, insertion, and continuation and expansion which involve the practical steps for the realisation of the project. It is estimated that the initial capital costs for founding the purpose-built private school will be approximately R5 million and that operating costs will be funded through a combination including income earned from an Endowment Fund established to subsidise mainly disadvantaged students, fund raising efforts, school fees, and diminishing state subsidies. The implementation of CAS as foundational programme in a purpose-built private-secondary school seems to be a massive project, but as the findings indicate, can be materialised through the PS/CF combination.

6.3 Discussion.

(1) The implication for implementing CAS in the public school sector is that its potential outreach in terms of contributing to nation building is much greater over shorter periods of time, at lower costs, than in a single private-school. Over 98% of all South Africa's schools are public schools catering for about 12 million school children countrywide, and Gauteng public

6.2 Discussion on research question 2: How can CAS be implemented in a purpose-built private secondary school, Gauteng?

The argument for the implementation of CAS in the private school sector of schooling in SA rests on the case for solving a specific problem arising from the felt needs of concerned persons on the ground who are committed to satisfying those needs outside of state control and bureaucracy. The implementation strategy argued for here was a hybrid Problem-Solving/Critical Factor [PS/CF] strategy involving the PS strategy and notions of critical factors as a combination, rather than the power-coercive RD &D strategy or the loose SI strategy. The emphasis of this PS/CF strategy was on the four critical stages of the implementation process beginning with the diagnosis of the felt need and articulation of the problem, followed by search and retrieval of ideas, finding the solution, and finally, applying the solution.

Evidence suggests that the PS/CF implementation strategy can be used for satisfying the felt need for implementing CAS as a foundational programme in a purpose-built private secondary school, Gauteng to serve students from mainly disadvantaged communities. The central problem addressed here is the founding of such a school in an informed and structured way. The study suggests that ideas and information relevant to finding a solution will need to be sought in a variety of ways including gleaning state policy documents, interviewing key informants and engaging consultants.

Evidence suggests that several issues affect the solution including leadership and vision of the project

There seems to be a core set of qualitative outcomes of students participating in experiential/ activities-based programmes. Researchers (Cannon 1995; Conrad & Hedin 1991) suggest that these programmes can and often do have a positive effect on the development of participants. Examples cited are: heightened sense of personal and social responsibility; more positive attitudes towards adults and others; more active exploration of careers; enhanced self esteem; growth in moral development; more complex patterns of thought, and greater mastery of skills and content that are directly related to the experiences of participants; sense of connection with a wider range of people, places and problems; new knowledge and understanding.

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their progress.

Learning in the CAS programme is encouraged through initiating and impelling students into activity and experience rather than by information transmission. There is no memorisation and regurgitation as in the traditional sense. Students are encouraged to think critically, learn by inquiry-discovery, pose questions, and to plan and execute their own activities - either individually or in groups and teams with the help of the teacher.

In view of the marked shift from traditional modes of learning and teaching ie. from an information transmission model to an activities-based model, student assessment is also different.

Assessment

CAS students are continuously assessed, but not as in the traditional marking model. There is passing or failing but not on the basis of marks, percentages and grades. Students pass or fail on the basis 'performance criteria' (IBO, 1992: 4) which relate to the qualitative engagement and development of the students rather than measurement and testing. Assessment here involves student diaries and journals, and obtaining evidence of initiative, planning and organisation; evaluating the amount of effort and commitment displayed by a student; appraising the benefit that the activity was or may be to others; it attempts to evaluate the understanding, attitudes, skills and values which have been acquired. Students, CAS teachers and CAS Supervisors are involved in this subjective assessment process, rather than only the teacher as is traditionally the case.

Efficacy of CAS.

Efficacy refers to the success of the programme in terms of its founding aims after learners have been engaged for a period of time, usually about two years. No evaluative studies of CAS per se are evident in the literature but studies of the impact of experiential programmes such as Outward Bound (Schulze 1972) and community service (Cannon 1995) have been made. The efficacy of CAS needs to be seen in the broader context of experiential/activities based programmes. The foci of these studies are usually on the qualitative development of the student in terms of the aims of the programme rather than attainment of grades.

Qualitative evaluations of experiential programmes are primarily concerned with the development of personal and social values and attitudes, leadership skills, psychological growth including self-esteem and confidence together with intellectual growth.

thinking, valuing the natural environment and, leadership skills, that programme's aims were marred by its racially exclusive ideology.

Hence, the educational aims and values promoted by the CAS programme are integral to and supportive of building a new nation and in eradicating the legacy of apartheid. (ANC 1994b; School Education Act (SEA) 1995; National Education Policy Act, (NEPA) 1996)

Content

As an alternative to content in the academic curriculum where content is comprised of information and related activities, organised in a number of subjects or disciplines, the programme content of CAS comprises a wide range of activities of a different kind. Here an activity may be setting up an Environmental Action Group to take up environmental concerns and physically engaging in doing something about it even if it means getting down, for example, to plant trees; learning and teaching skills, for example, how to set up food gardens in a poor community or providing first-aid training to the local soccer team or helping at the local village clinic.

The distinctive feature and departure point of the CAS programme is the connection of its content with creativity, action, and service in an integrated way. (See Appendix D for a sample list of CAS activities in IBO schools). Following Stenhouse's argument (Stenhouse 1975: 84-6) content is not selected on the basis of the contribution it makes to a behavioural objective, as in the Tylerian model of curriculum design, but on the basis of criteria. And the criteria for the selection of CAS activities are based on principles rather than prescription of activities. (IBO 1992: 3)

Pedagogy

CAS pedagogy is activities-based or experiential learning based rather than rote-learning, teacher-talk, information transmission and 'topping up the empty bucket' as in traditional modes of teaching and learning in academic subjects. Activities-based learning involves learning-by-doing, mainly outside the classroom. It involves active engagement into 'worthwhile activities', (Stenhouse 1975: 84) not passive, captive listening, and can have a significant positive impact on the social, psychological, and intellectual development of adolescents. (Conrad and Hedin 1982: 58; Kelly 1989: 13)

The teacher or CAS leader plays the role of a facilitator or a supervisor, rather than a technician or 'matheticist' (Gilbert in MacDonald-Ross 1973: 356). S/he brings her/his leadership skills and guides students in selecting and setting up their projects, monitoring them and assessing

APPENDIX B: CHARACTERISATION OF CAS AS PROGRAMME.

As an activities-based programme, CAS differs markedly from conventional academic programmes in the way that it is conceived and organised in its design dimensions. What follows is a critical analysis and discussion of the interactive design dimensions of the CAS programme ie. its ideological basis, aims, content, pedagogy, and assessment. The efficacy of the programme is also briefly discussed.

Ideological basis

Apartheid era 'instructional programmes' (DNE 1994a) such as Youth Preparedness and Veld School were exclusively for white schools and were devised on the ideologies of 'Christian National Education' [CNE] (Ashley 1989), white superiority, and hegemony over black racial groups as can be discerned from the aims of that programme as quoted in the TED MANUAL (1972).

In contrast, the IBO (1992 :1) declares that the CAS programme is founded on the assertion that

...education ...is inevitably involved in the development of attitudes and values which transcend barriers of race, class, religion, sex or politics and further the aims of international understanding.

Clearly the basis of the programme is anti-discrimination which is at the heart of new government thinking in SA and the Bill of Rights. (ANC 1994a: 60; Amato 1994: 149) Further CAS is based on the idea that 'the essential aspects of education may exist outside of both the classroom and examination hall' and 'education must go well beyond the provision of information' (IBO 1992: 1) implying the notion of outdoor, examinationless, activities-based education.

Aims

The broad educational aims of CAS as an activities-based programme focuses on challenging and extending the student: to be creative, active learners thereby developing individual students' attitudes, values, skills and interests with a view to enabling and empowering young people to live, to work, to contribute, to serve others, especially the disadvantaged, and co-exist as an international citizen in a global village. Attitudes of mutual respect and tolerance; values of self reliance and a service ethic; leadership skills of initiating, planning and organising; personal interests in art, and sport are promoted. (IBO 1992) CAS aims dovetail with key RDP aspirations of 'nation building' and 'developing our human resources'. (ANC 1994a: 4-9)

While Veld School programmes also boasted a variety of 'progressive' educational aims such as creative and critical

examination as an objective without loss of quality, since the standards of the examination then override the standards immanent in the subject'. (Stenhouse 1975: 95) According to Stenhouse, the model's greatest weakness and also its greatest strength, is the teacher. And therefore, enormous emphasis is placed on teacher development.

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APPENDIX A: THE PROCESS MODEL.

The process model arose as an alternative to and contrasts sharply with the traditional model. The traditional model claims to be rooted in a scientific-empirical 'value-neutral' ideological position promoting 'rule-following' (Grundy 1987: 12) whereas the process model is rooted in an explicit qualitative values-based ideological position promoting higher order mental skills including understanding and critical thinking.

The process model is not concerned with the bodies of knowledge, or content, that are assimilated as in a content-based curriculum but is rather concerned with 'the processes of development that are promoted'. (Kelly 1989: 17) The Tylerian model on the other hand focuses on bringing about 'significant changes the students' patterns of behaviour' (Tyler 1949: 44, emphasising education as a means towards certain predetermined behavioural ends or objectives.

The process model carries with it strong notions of experiential and exposure learning, that is, learning through a process of engaging and being initiated into 'worthwhile activities'. (Stenhouse 1975: 84) These activities are worthwhile in themselves, rather than as means towards objectives, in that they can be justified intrinsically and they illuminate other areas of life. Stenhouse argues that these activities can be 'selected as 'content' on grounds other than the scrutiny of their specific outcomes in terms of student behaviours'. (Stenhouse, 1975: 85) These grounds are essentially principles, procedures and criteria for the selection of content, rather than as means to predetermined ends. (Appendix I)

The pedagogy employed by the process model to facilitate the process of teaching and learning is also different. The teacher plays a central role as senior learner in initiating students into worthwhile activities and acts as resource rather than an expert. Emphasis is placed on the discovery-inquiry, dialogical, interactive, and experiential approaches to learning rather than by information transmission, teacher talk, rote-learning, recall, and regurgitation. (Appendix J)

With regard to assessment of students the process model pursues understanding, rather than grades and aims to enskill and empower, and in this context the teacher is a critic, not a marker in order to help students improve their capacity to work to standards and criteria immanent in the worthwhile activity by critical reaction to work done. For Stenhouse, the process model in its pure sense, 'can never be directed towards an

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10.3 SUBJECT CURRICULUM**10.3(a) JUNIOR PRIMARY PHASE:**
Which syllabuses are used?

10.3(b) SENIOR PRIMARY PHASE:
Which syllabuses are used?

ARE FORMAL TESTS AND EXAMINATIONS WRITTEN?

ARE PROMOTION REQUIREMENTS IN LINE WITH DEPARTMENTAL POLICY?

10.3(c) JUNIOR SECONDARY PHASE:
Which syllabuses are used?

ARE FORMAL TESTS AND EXAMINATIONS WRITTEN?

ARE PROMOTION REQUIREMENTS IN LINE WITH DEPARTMENTAL POLICY?

10.3(d) SENIOR SECONDARY PHASE:
Which syllabuses are used?

8. FEE STRUCTURE

Indicate the proposed fee structure:

9. SCHOOL CALENDAR

9.1 No. OF SCHOOL DAYS (OR SCHOOL HOURS) PER ANNUM.

9.2 LENGTH OF SCHOOL DAY EXCLUDING BREAKS:

10. CURRICULUM AND SYLLABUSES:

10.1 SUBJECTS TAKEN:

10.2 LIST ANY SHORTCOMINGS (e.g. Allocation in time:)

6. STAFF:**6.1 NAME OF PRINCIPAL:** _____**6.2 QUALIFICATIONS.** _____

Academic: _____

Professional: _____

6.3 COMMENT AND RECOMMENDATIONS _____

6.4 IS A STAFF ATTENDANCE REGISTER KEPT YES/NOT YET?**7. SCHOOL ORGANISATION****PUPILS****7.1 ARE THERE ATTENDANCE REGISTERS? YES/NONE****7.2 IS THERE AN ADMISSIONS REGISTER? YES/NONE****7.3 NUMBER OF PUPILS OLDER THAN COMPULSORY SCHOOL GOING AGE****7.4 NUMBER OF PUPILS OF SCHOOL GOING AGE.**

CONFIDENTIAL.

GAUTENG DEPARTMENT OF EDUCATION

CONTROL FORM FOR THE
REGISTRATION OF A PRIVATE SCHOOL

RELEVANT ACTS

1. Gauteng School Education Act (Act No.6 of 1995)

1. NAME OF SCHOOL: _____

2. DISTRICT: _____

3. SCHOOL GOVERNING BOARD _____

4. CONSTITUTION:-

Is this available YES\NO

Comment and recommendation of district Director:

5. ACCOMMODATION DETAILS

* Is a certificate from the Health Department of the local Health Authorities available YES\NOT YET?

* Do the basic facilities meet the minimum requirements: YES\NO

5.1 OFFICE: _____

5.2 SICK ROOM: _____

5.3 STORE ROOM: _____

5.4 TOILET FOR STAFF: _____

5.5 NO. OF CLASSROOM AND LABORATORIES - ARE THESE ON THE PLAN YES\NO
(IF NOT, LIST ROOMS AND SIZES) _____

5.6 RECOMMENDATIONS _____

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facilities and lower teacher salaries, with demotivated headmasters, teachers and students, and helpless parents, how will these schools take to the implementation of CAS.

Where there is a breakdown of this nature, and where clearly there is no semblance to a learning organisation, it would be difficult to perceive the implementation of CAS because the school factors do not seem to be conducive to change even though limited support is forthcoming from the state, and the innovation is both elegant and proven to be efficacious. The programme may never be implemented because the headmaster as gatekeeper may never communicate it with other roleplayers as evidenced in the case of PSP, where materials (science kits) remained unopened in the headmasters' office in some schools. (Raubenheimer 1992/1993: 72) Teachers may regard programme time as 'free time' as with programmes such as guidance.

Case 3

Simunye High has similar socio-economic circumstances prevalent as in the school in case 2, but a major difference is that the whole school including all key participants, starting from the headmaster, picks up on the enthusiasm of the new South Africa, building of a new nation, the RDP and the culture of learning and teaching. The key participants collectively share in the new mission and goals of the country and eagerly participate in creating their schools as learning organisations, and provide the limited resources at its disposal for the growth of that school. The state too plays its part in facilitating new legislation and providing the funding that it is capable of within new equity seeking policies, and in empowering governing bodies to take certain curriculum decisions.

Given that the CAS programme is seen as a programme that will add to the personal growth of the learner, teacher and serve the broader community, it is likely that CAS will be implemented successfully.

This scenario was clearly demonstrated in the case of PEUP where despite differences in the situation at local schools, some extremely poorly resourced and located communities subjected to abject poverty, the programme was implemented enthusiastically. Because it was perceived initially by headmasters that PEUP was needed, and that PEUP was launched within the context of a broader state campaign (popagano), teachers and parents were motivated, went for training provided by PEUP, gained an understanding of the change required and the benefits that are likely to follow for the children and the nation at large, and implemented the PEUP programme in their classrooms.

It was argued that where the combination of all critical factors are present, despite variations in the socio-economic conditions, it is likely that CAS will be implemented. Whereas if certain critical factors are absent as in case 2, the programme will not 'fly'.

placed on it by the state, an innovative programme Integrated Studies (IS) was implemented. Given that the school was empowered by relevant legislation, the headmaster was able to motivate the school governing body and teachers that IS was the way to go: they were enthusiastic and motivated about learning and training in a new programme involving new design dimensions. No training was provided by the state to teachers because the state itself did not have the capacity or ability to provide that training. All the teacher training was organised by the school and paid for by the school. This is because the school had the capacity including financial resources and the attitude of commitment on the part of its teachers, under the strong and inspiring leadership of its headmaster.

The enabling power that the school enjoyed at the level of autonomy and decision making may have also been a contributory factor in creating an attitude of independence resulting in the school taking the initiative, rather than waiting for leadership to come from elsewhere.

In dealing with the implementation of CAS, as a programme initiated by the state, this school may react positively if in its understanding, the programme will bring about meaningful change, will be beneficial in developing student outcomes, that teachers will be enthusiastic and able to cope, given the large load of work they already have to carry. However, much would depend on the leadership in the school to foster the ownership of the programme and participation by all concerned.

Case 2

Ikhaya Lethu Secondary (fictitious name) is a predominantly African school within the former DET located in Soweto, also a former 'group area' for Africans. The school is poorly resourced in terms of school funds, facilities and equipment. Approximately 50% of the school teachers have less than the minimum educational requirements (Matric plus 3 years of teacher training) resulting in a large proportion of underqualified staff. Ikhaya Lethu, as with other schools in the DET sector, may be generally characterised as a 'follower' rather than a 'leader' because the school was not encouraged nor allowed to initiate any programmes but rather to follow what was decided at the top by the education bureaucracy. The headmaster was trained to follow instructions, rather than to initiate innovations into the school. The culture of learning and teaching also steadily broke down because of the political turbulence in the country, and teachers and students are largely demotivated and disinterested in education.

The most deprived sector of education is within the African and broader black communities in South Africa. The Minister of Education, Professor Sibusiso Bengu in a Business Day (19/5/1994) report said: '... Our biggest challenge is the African community, the most deprived and the Cinderella of the entire education system'. With the predicament that schools such as Ikhaya Lethu are generally poorly resourced in terms of

APPENDIX E:
VARIATIONS IN THE IMPLEMENTATION OF CAS IN PUBLIC SCHOOLS
(GAUTENG) - HYPOTHETICAL CASES.

The scenarios wherein CAS is implemented by mutual adaptation and development where it is that the state plays a supportive and facilitative role, and the school responds creatively, the degree of adaptation by the individual school and state in reality, it is argued, may differ. This is so because of past imbalances and disparities that have plagued South African schooling for decades, and that each school is in a unique situation and has differing circumstances for example in terms of its ethos, leadership, staffing, and resources. This implies that individual public schools in a district will have differing levels of commitment, abilities and capacities to adapt in the implementation of CAS. Whereas in an authoritarian one-way process the programme may be simply disseminated to thousands of schools across the nation, without mutually recognising the respective strengths and weaknesses of either state or school, mutual adaptation and development requires that stronger schools will compensate for weaknesses in the state and weaker schools will tend to draw more strenuously from the state.

School within the former white departments where there are more resources with better qualified staff might pursue the implementation of CAS better than schools within former black departments where there may be a dearth of facilities, and where school pupils and teachers may be the target of violence and criminal activity. Some schools may be self driven to adapt and implement without much outside support, while others may need much more support. A principal within one school that has the drive, vision and support of his/her staff and students may well implement the programme more effectively than his/her counterpart in another school, despite differences in school resources. Differences in the school ethos, abilities, capacities and commitment of key participants, and local circumstances, it is argued, will impact on the implementation of CAS differently.

Attempts to implement CAS in certain state schools may well result in nonimplementation. On the other hand, certain schools may well adapt CAS and use it as an opportunity for further growth and development, irrespective of inherited resources. This phenomenon needs to be examined in different scenarios. I use three hypothetical cases on a continuum, and one is likely to find a range of factors impinging on the implementation. Critical to these three cases within the state system is their differing abilities to implement CAS and to cope with it in a way characteristic of a learning organisation.

Case 1

Greenwood High (fictitious name), is a predominantly white Model C school located in the middle class suburb of Mondeor, a previously whites only classified area in terms of the notorious Group Areas Act. Despite the funding restrictions that were

APPENDIX D:

SAMPLE CAS ACTIVITIES (Extracted from (1) various CAS programme summary questionnaires sent by IB schools to regional IBO offices; and (2) IBO CAS Activities Handbook. (IBO 1992: 23-6))

CREATIVITY

Calligraphy
Writing for school newsletter/magazine
Recitation of Al-Qur'aan
Speech and drama
Asian Evening
Art/ Pottery/ screenprinting
Choir
Photography
Youth Parliament
Young Achievers
Maths competition
Gardening design, planning
Camp leader

ACTION

Sports (indoors and outdoors)
Hiking and educational excursions
Development of hobbies and skills
Scuba Diving
President's Award Scheme
Fitness training
First-aid course
United Nations Evening - Foodstalls
Boy Scouts
Special Interest Clubs (Computer, Debate, Environment)
Political campaign
Outward Bound
Student government
New student orientation
Cleaning place of worship
Video making

SERVICE

Participating in hunger project
Activities with local orphanage
Assisting junior students in coaching and tutoring
SPCA volunteer
Red Cross volunteer
School Office Holders (Prefects/Leaders)
Old Age Home
World Wide Fund for Nature
Tree planting
Coast Guard
Working with street children
Social forestry
Solar cookers and stoves
Peer Counselling
Fund raising for various charities

The International Baccalaureate (IB)

THE IB PROGRAMME is a two-year pre-university course, designed to facilitate the mobility of students and to promote international understanding. The comprehensive course of study for the Diploma is designed to provide students with a balanced education.

CURRICULUM AND EXAMINATION

The curriculum consists of six subject Groups:

- Group 1 **Language A1** (first language) including the study of selections from World Literature
- Group 2 **Language B** (second language) or a second language A
- Group 3 **Individuals and Societies**; History, Geography, Economics, Philosophy, Psychology, Social Anthropology, Organisation and Management Studies
- Group 4 **Experimental Sciences**; Biology, Chemistry, Applied Chemistry, Physics, Environmental Systems
- Group 5 **Mathematics**; Mathematics, Mathematical Methods, Mathematical Studies, Mathematics with Further Mathematics
- Group 6 **One of the following options:**
 - (a) Art/Design, Music, Latin, Classical Greek, Computing Studies.
 - (b) A School-based Syllabus approved by IBO

Alternatively a candidate may offer instead of a Group 6 subject: a third modern language, a second subject from Individuals and Societies, a second subject from Experimental Sciences.

To be eligible for the award of the Diploma all candidates must:

1. offer one subject from each of the above Groups;
2. offer at least three and not more than four of the six subjects at Higher level and the others at Subsidiary level;
3. submit an Extended Essay in one of the subjects of the IB curriculum;
4. follow a course in the Theory of Knowledge;
5. engage in CAS Activities representing Creativity, Action and Service.

International Baccalaureate Organisation (IBO)

INTERNATIONAL ORGANISATION

The International Baccalaureate Organisation (IBO) is based in Geneva. Other offices are in Buenos Aires, Cardiff, New York and Singapore. There is representation in Australia, India, Mexico and the United Kingdom. The IBO is a non governmental organisation holding consultative status with UNESCO. It is registered as a foundation under Swiss law. Governed by an international Council of Foundation, it is supported by Standing Conferences of Governments and of Heads of Schools.

IB Council of Foundation

The Council meets annually and is composed of elected representatives from the Standing Conference of Governments, the Standing Conference of Heads of IB Schools, and individuals distinguished in the field of international education.

ACADEMIC ORGANISATION

Curriculum Board

The Curriculum Board ensures general oversight of the curriculum. Its responsibility is to recommend on basic policy and to commission the work of individual Subject Committees according to an overall timetable of review and revision.

Examining Committee

The Examining Committee has final authority on the setting of examinations and the assessment of candidates for the Diploma. Members include Group Coordinators and Chief Examiners in the different subjects of the examination.

IB Grades

At both Higher and Subsidiary level, each examined subject is graded on a scale of 1 (minimum) to 7 (maximum). The award of the Diploma requires a minimum total of 24 points and satisfactory completion of the Theory of Knowledge course, the Extended Essay and CAS.

Examples of IB Diplomas

Higher	Subsidiary	Higher	Subsidiary
Mathematics	English A	French A	Mathematics
Physics	German B	Arabic B	Biology
Chemistry	History	Economics	Art/Design

The IB and University Recognition

Students holding the IB Diploma have been accepted by universities and other institutions of higher education in the following countries, usually on the basis of negotiated equivalence agreements with these bodies and Ministries of Education in accordance with national requirements:

Argentina	India	Poland
Australia	Indonesia	Portugal
Austria	Iraq	Senegal
Bangladesh	Ireland	Singapore
Belgium	Israel	Slovenia
Bolivia	Italy	South Africa
Botswana	Japan	Spain
Brazil	Jordan	Sri Lanka
Canada	Kenya	Sudan
Chile	Malawi	Sweden
Colombia	Malaysia	Switzerland
Croatia	Malta	Tanzania
Denmark	Mexico	Turkey
Ecuador	Netherlands	Uganda
Egypt	New Zealand	United Kingdom
Finland	Nigeria	United States
France	Norway	of America
Germany	Pakistan	Uruguay
Ghana	Papua	Venezuela
Guatemala	New Guinea	West Ind.
Haiti	Peru	Zambia
Hong Kong	Philippines	Zimbabwe

IB Participating Schools

The IB may be offered only in schools and colleges which have been individually assessed and approved by the IBO. Currently there are 480 member schools in the countries or regions listed below

Argentina	Guam	Panama
Australia	Hong Kong	Papua New Guinea
Austria	Hungary	Peru
Bahrain	India	Philippines
Belgium	Indonesia	Portugal
Bolivia	Ireland	Singapore
Brazil	Italy	Slovenia
Canada	Japan	Spain
Chile	Jordan	Sri Lanka
China (People's Rep.)	Kenya	Swaziland
Colombia	Korea	Sweden
Costa Rica	Kuwait	Switzerland
Croatia	Lesotho	Syria
Denmark	Libya	Taiwan
Ecuador	Malaysia	Tanzania
Egypt	Mexico	Thailand
El Salvador	Morocco	United Arab Emirates
Ethiopia	Netherlands	United Kingdom
Fiji	New Zealand	United States of America
Finland	Nigeria	Uruguay
France	Norway	Venezuela
Germany	Oman	
Greece	Pakistan	

Schools addresses may be obtained from appropriate Regional Offices

IBO AIMS AND IB DIPLOMA

AIMS

The International Baccalaureate Organisation aims:

- to improve and extend international education and so promote international understanding;
- to facilitate student mobility and provide an educational service to the internationally mobile community;
- to work in collaboration with national educational systems in developing a rigorous, balanced and international curriculum.

The International Baccalaureate Organisation seeks to achieve these aims through the provision of

- an internationally recognised pre-university curriculum;
- a university entrance examination, the IB Diploma, which gives access to higher education worldwide.

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K.2

CAS PBPS (G)BUDGETED INCOME STATEMENT FOR THE YEARS ENDING 31 DECEMBER 1999
2000 & 2001.

	Note	2001 R	2000 R	1999 R
Subsidies	11	431 000	269 000	-
Fundraising		300 000	80 000	20 000
Endowment Fund	2	720 000	360 000	220 000
School Fees	9	810 000	338 000	90 000
TOTAL INCOME		2 261 000	1 047 000	330 000
TOTAL EXPENDITURE		2 240 000	1 040 000	320 000
Expenses	4	2 160 000	990 000	300 000
Salaries	3	1 836 000	841 500	255 000
Other expenses		324 000	148 500	45 000
Contingency	12	80 000	50 000	20 000
NET INCOME		21 000	17 000	10 000
		*****	*****	*****

APPENDIX K:
PROJECTED FINANCIAL STATEMENTS

K.1

CAS PBPSS (G)
PROJECTED BALANCE SHEETS AT 31 DECEMBER 1999, 2000 &
2001.

	2001 R	2000 R	1999 R
<u>CAPITAL EMPLOYED</u>			
SHARE CAPITAL	10	10	10
ESTABLISHMENT FUND	5 000 000	5 000 000	5 000 000
ENDOWMENT FUND	7 000 000	6 000 000	3 000 000
NON-DISTRIBUTABLE RESERVES	48 000	27 000	10 000
	-----	-----	-----
	12 048 010	11 027 010	8 010 010
	-----	-----	-----

EMPLOYMENT OF CAPITAL

<u>FIXED ASSETS</u>			
Land, Buildings and Equipment (note 5,6 &7)	5 000 010	5 000 010	5 000 010
Endowment Investments	7 000 000	6 000 000	3 000 000
	-----	-----	-----
	12 000 010	11 000 010	8 000 010
<u>CURRENT ASSETS</u>			
Cash at Bank	48 000	27 000	10 000
	-----	-----	-----
	12 048 010	11 027 010	8 010 010
	-----	-----	-----

APPENDIX J:
PEDAGOGICAL AIMS OF ACTIVITIES

Adapted from Bruner's Man A Course of Study. (Stenhouse 1975: 38-39)

- a. To initiate and develop in youngsters a process of question-posing.
- b. To teach a research methodology where children can look for information to answer questions they have raised.... and apply it to new areas.
- c. To help youngsters to develop the ability to use a variety of first-hand sources of evidence.
- d. To encourage youth to develop hypotheses and draw conclusions.
- e. To conduct group discussions in which youngsters learn to listen to others as well as to express their own views.
- f. To give sanction and support to open-ended discussions where definitive answers to many questions are not found.
- g. To encourage youth to reflect on their own experiences.
- h. To create a new role for the teacher, as a facilitator or a mediator and a resource rather than an authority.
- i. To create opportunities and engage students in appropriate leadership roles.

APPENDIX I:
CRITERIA FOR SELECTING ACTIVITIES

Below are Raths' criteria (Stenhouse 1975: 86-87):

All other things being equal, one activity is more worthwhile than another:

- a. If it permits children to make informed choices in carrying out the activity and to reflect on the consequences of their choices.
- b. If it assigns to students active roles in the learning situation rather than passive ones.
- c. If it asks students to engage in inquiring into ideas, applications of intellectual processes, or current problems, either personal or social.
- d. If it involves children with realia (ie. real objects, materials and artefacts).
- e. If completion of the activity may be accomplished successfully by children at several different levels of ability.
- f. If it asks students to examine in a new setting an idea, an application of an intellectual process, or a current problem which has been 'previously studied'.
- g. If it requires students to examine topics or issues that citizens in our society do not normally examine and that are typically ignored by the major communication media in the nation.
- h. If it involves students and faculty youth in 'risk' taking not a risk of life or limb, but a risk of success or failure.
- i. If it requires students to rewrite, rehearse, and polish their initial efforts.
- j. If it involves students in the application and mastery of meaningful rules, standards or disciplines.
- k. If it gives students a chance to share the planning, the carrying out of a plan, or the results of an activity with others.
- l. If it is relevant to the expressed purposes of the students.

7. Syllabus

- 7.1 Does IBO have a specific syllabus for CAS? Please provide full details.
- 7.2 What are the specific values that are being promoted by IBO through the CAS Program?
- 7.3 To what extent are teachers given discretion to decide on activities?
- 7.4 To what extent are students given discretion to decide on activities?
- 7.5 To what extent are parents/governing bodies given discretion to decide on activities?

8. Pedagogy

- 8.1 Please provide details of the pedagogy employed by teachers.
Kindly furnish details of attitudes promoted by teachers.

9. Assessment

- 9.1 Please provide full details of assessment procedures that are prescribed in respect of the CAS program.
- 9.2 How exactly are students assessed and on what basis?
- 9.3 Are student attitudes, behaviour and character development assessed? In which way.

10. General

What in your view are the essential requirements for the implementation of the CAS program in state schools?

11. IBO Schools

Kindly provide me with the names and addresses of 9 IBO schools where the program has enjoyed overwhelming success, and which you would recommend to obtain further information on the actual implementation of CAS.

12. IBO Research

Please direct me to any research that has been done or evaluations undertaken of the CAS program. Where possible please let me have copies.

Your co-operation is highly appreciated and I look forward to receiving further communication from yourself.

Yours faithfully

PP *Dajee*

Z.A. CAJEE

2. Funding

- 2.1 What is the cost of implementing the CAS program at school level?
- 2.2 What are the supervision costs?
- 2.3 What are the costs of materials?
- 2.4 What are the additional salary costs of personnel specially employed for the implementation of CAS?
- 2.5 What is the average budget of the CAS program at an IBO affiliated school?
- 2.6 Are all costs borne by the school or are there any subsidies from government or IBO?
- 2.7 How much of school fees are allocated to CAS activities?

3. Teacher qualifications and requirements

- 3.1 How many teachers are required for the implementation of CAS? How is this number determined?
- 3.2 What are the minimum teacher qualifications required for CAS teachers?
- 3.3 Are teachers expected to have any specific/special qualification to teach CAS?

4. Teacher training and support

- 4.1 What teacher training programmes, workshops, and general support is provided by IBO or respective schools in respect of the CAS program?
- 4.2 Who conducts training programmes for CAS teachers, at what cost and for what duration?
- 4.3 What ongoing support do CAS teachers enjoy from the school or IBO?
- 4.4 Does IBO have any specific preservice (Preset) or inservice (Inset) training programmes? Please give details of courses and their cost and duration.

5. Parent and Community Participation

- 5.1 What is the IBO policy towards parent and community participation in CAS activities?
- 5.2 To what extent, and in which ways are parents actively encouraged/required to participate in CAS activities?

6. Time Tabling

- 6.1 What is the prescribed time allocation for CAS activities per annum?
- 6.2 How is this time allocated on a weekly basis?
- 6.3 Are students expected to work outside time-table time? If so, to what extent.
- 6.4 Does IBO have any specific recommendations with regard to time tabling? Please provide details.

ZEIN CAJEE

P O Box 101 Crown Mines 2025 South Africa

1st Floor Saley House 81 Crown Road Fordsburg 2092 South Africa

Tel (27 11) 834 6981 Telefax (27 11) 834 1809

23 November, 1994.

ATTENTION: MRS E.V. TAYLOR

The Regional Director,
International Baccalaureate,
Pascal Close, St Mellons,
CARDIFF,
South Glamorgan,
Wales CF3 0YE
GREAT BRITAIN

Dear Mrs Taylor,

CAS ACTIVITIES RESEARCH PROJECT

I am presently investigating the possibilities and implications of implementing the IBO CAS program in state schools in South Africa. This project is being done as part fulfilment of the requirements for the M.Ed degree at the University of the Witwatersrand, Johannesburg.

I have chosen this particular topic as I strongly feel that such a program will be appropriate to the social transformation needed in South Africa, which is a microcosm of a multicultural world. I believe that the program has immense potential in fostering empathy, international understanding and mutual respect and in developing leadership qualities among school pupils in South Africa, as it has done for the international community.

Part of my research includes obtaining information from yourselves and from IBO schools that has successfully implemented the CAS programme.

I would greatly appreciate if you/your organisation can assist me, by providing me with the following information. Should there be costs involved in providing documents, please advise me accordingly.

1. Prescribed structures for implementation

- 1.1 What structures are needed in schools to implement the program?
1.2 What supervision is required and who carries it out?
1.3 What personnel and what qualifications are required to implement the program, at school level and at country level.

2/Funding

Z A Cajee BBusSc Hons BComp CA(SA) B Ed

other private schools?

External support

27) What external support is available and accessible for the innovation?

Role of Ministry/ Educational Agencies

28) What was the role of the educational ministry in facilitating your innovation? What assistance came from those quarters and what future commitments are there?

11) Do you require special premises for the implementation of your innovation? Cost involved?

Time Table Time

12) Do you use time table time for the innovation or is it done as an after school activity? How much time is allocated? Is it sufficient?

Teacher involvement

13) What is the level of teacher involvement in your innovation? i.e. in terms of time commitment, enthusiasm, writing up materials, introducing new ideas.

14) What is the level of teacher autonomy in designing material/content for the programme?

Funding

15) What were the funding requirements for the introduction of your innovation? i.e. Teachers salaries, materials, equipment, texts, premises etc.

Are students expected to pay any additional fees to recover expenses? Are the fees affordable? Do all students diligently/generally pay their due share of the cost?

Does the school have to supplement costs from other sources?

Evaluation

16) What particular problems have you encountered in implementing the programme? (Transport, funding, materials, teachers, parental participation, response of community...)

17) How has the innovation contributed to school pupils in terms of their learning? (Confidence, self esteem, building relations...)

Teacher Training

18) Did you require any specialised teachers to teach the particular innovation?

19) What particular teacher training programme did your teachers involved in the innovation undergo?

20) Were there any external courses involved?

21) What was the cost of such training?

22) Is there any state supported INSET available to your private school?

23) Do you have any specific INSET for your teachers involved in the innovation?

General

24) What was the principals role in the innovation? (support)

25) How is the innovation monitored?

26) Do you have any plans to disseminate your innovation to

5) Were there any particular legal requirements involved in the establishment and registration of the school?

Funding

- 1) Does the school building belong to the school? How was the establishment of the school funded?
- 2) How are the operations of the school funded? (teachers salaries, text books, stationery, equipment etc)
- 3) Did you receive any subsidy from the state for the establishment of the school?
- 4) Do you receive any subsidies for operations at the present moment? On what basis?

(C) Implementation of Innovation

Background

- 1) Is there any particular curriculum that the school follows? Why?
- 2) Has the school implemented any own course or programme outside of official requirements?
- 3) Why did you implement this particular programme?

Process

- 4) What was the process involved in the implementation of the innovation? Where and how did it start? Was it home grown or was it implemented in liaison with an outside organisation or consultant?
- 5) Who was involved in the adoption decision? (principal, users, governing body, outside agencies). How was the decision made? (top-down, persuasive, consultative, collegial-participative, or delegated styles)
- 6) Did you experience any difficulties in implementing your innovation? What were they (if any)?
- 7) Was there any piloting involved? How long? What convinced you that the innovation was working or deserved to be adopted and brought into your mainstream curriculum?

Parents support

- 8) What were parents perceptions of the innovation? Did you have their support? What kind of support? (moral, financial, time)

Authority

- 9) What authority did you need to implement such a programme? sanction by the department? or your school governing body?
- 10) To what extent does your school governing body have the authority to implement new programmes at the school ie. those that are not officially sanctioned.

Premises

APPENDIX G:RESEARCH INSTRUMENTSINTERVIEW QUESTIONS: PRIVATE /PUBLIC SCHOOLS

(AIMED AT PERSON/S DIRECTLY INVOLVED IN ESTABLISHING A PRIVATE SCHOOL AND/OR IMPLEMENTING INNOVATIVE PROGRAMMES IN THAT PUBLIC/PRIVATE SCHOOL).

DATE OF INTERVIEW:
PERSON/S INTERVIEWED
VENUE:

TIME:

PURPOSE: CONCERN WITH (1) ESTABLISHMENT OF PURPOSE BUILT PRIVATE SCHOOL AND (2) IMPLEMENTATION OF INNOVATORY PROGRAMMES:

BIODATA OF SCHOOL

- 1) Name of School
- 2) Location address
- 3) No of pupils
- 4) No of Teachers
- 5) Subjects taught
- 6) Innovations introduced
- 7) School budget
- 8) Date established
- 9) Key policy/ies
- 10) Mission
- 11) Brief description of school setting
- 12) Type of school: Primary/high; Monastic/Coed
- 13) Documents about school: Brochures, Financial statements,

(1) Establishment of School(A) Background questions :

- 1) Could you please give me some background to the establishment of this school.
- 2) How and Why was it started?
- 3) What was your vision?
- 4) What was the need?
- 5) Could not the public school system cater for your particular needs or problem?
- 6) Who was the driving force behind the school? Was it a particular individual or an organisation? What was the motivation?

(B) Procedure

- 1) How did you go about setting up this school?

Legal and Statutory requirements

- 1) Is the school a bona fide registered school?
- 2) With which education department is the school registered?
- 3) What was the procedure involved in the registration of this school?
- 4) Was any difficulty experienced in the registration of the school?

ARE FORMAL TESTS AND EXAMINATIONS WRITTEN? _____

ARE PROMOTION REQUIREMENTS IN LINE WITH DEPARTMENTAL POLICY? _____

10.4 EXAMINING BODY: _____

11. RECOMMENDATIONS AND ADVICE: _____

DISTRICT CO-ORDINATOR _____ DATE _____

11. RECOMMENDATION BY DISTRICT DIRECTOR: _____

DISTRICT DIRECTOR _____ DATE _____
MaRegform

(THIS FORM IS A FACSIMILE OF THE ORIGINAL)

K.3

CAS PBPS (G)NOTES AND ASSUMPTIONS TO BUDGETED FINANCIAL STATEMENTS
1999, 2000 & 2001.

1. Number of pupils: 1999:100; 2000: 300; 2001: 600
2. Endowment fund return on investment: 12% per annum
3. Teacher salaries based on 85% of total expenditure.
4. Per capita expenditure: per pupil per annum excluding capital expenditure.

1999: R3 000; 2000: R3 300; 2001: R3 600 based on an estimated compounded increase of 10% per annum on the 1995/1996 per capita expenditure of R2223.
5. Cost of land: R1 000 000. Based on cost of agricultural land.
6. Cost of Buildings: R3 685 000. Based on current building costs.
7. Cost of Equipment: R315 000 ('Guesstimate')
8. No adjustments have been made for inflationary increases in capital costs.
9. School fees: Assumed that 90% of parents would contribute R1 000,00 per annum in 1999; R1 250,00 per annum in 2000; and R1 500,00 per annum in 2001.
10. It is assumed that shortfalls in the school budget would be made up of further fundraising efforts for donations.
11. State subsidies are based on current expectations of future subsidies.

1996/97 average:	R1755	(GDE Circular 8/10/1996: 1)
1997/98	R1404	(GDE Circular 22/7/1996: 1)
1998/99	R1123*	
1999/2000	R 898*	
2000/2001	R 718*	

* It is assumed that state subsidies will decrease at a rate of 20% per annum.
12. A 'guesstimated' amount is provided for unforeseen costs in the form of contingency expenses.
13. It has been assumed that full scholarship grants have been made from endowment fund income and no repayable bursary loans have been made.

Author: Cajee,Z.A.

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