

# **Towards the Design of a Networked Social Services Media Model to Promote Democratic Community Participation in South African Schools**

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## **Abstract**

“A democracy is more than a form of government; it is primarily a mode of associated living, of conjoint communicated experience. The extension in space of the number of individuals who participate in an interest so that each has to refer his own action to that of others, and to consider the action of others to give point and direction to his own, is equivalent to the breaking down of those barriers of class, race, and national territory which kept men from perceiving the full import of their activity. (Dewey, 1916)”

The belief that society benefits from the adoption of democratic practices and a desire to improve schooling in South Africa, motivate this research. The social objective of the research is therefore to determine what are the causes of the persistent failure of the South African schooling system and to what extent community participation may serve to resolve them. The technological objective is to determine the feasibility of utilising social media for addressing social problems through enabling participative democracy. The potential for community participation in South African schools is therefore viewed through the lens of Internet enabled participative democracy. A design science-inspired research framework is devised in a qualitative study adopting a critical interpretivist epistemology. The study entails three phases applying a mixing of methods to perform critical research, context-based evaluation and critical interpretive evaluation.

The first phase reveals the fundamental problems impacting the schooling education system in South Africa and determines that the underlying cause for their persistence lies in a systemic problem of conflicting legislation and policies caused by ideological differences within the ruling tripartite alliance. It further identifies through critical inference, specific practices by school communities which could improve the education system by participative, democratic action.

The second phase evaluates the capacity for selected, popularly used social media artefacts to serve as communication and collaboration tools, in the schooling context, to enable community participation. These are found to be inadequate.

The third phase is an evaluation of the technologies capable of facilitating activities required to achieve democratic participation of communities in schools and results in the description of an artefact that could enable a “networked social service media” system.

The paper substantiates the notion that an appropriately designed, Internet enabled social media artefact, can promote the participation of communities in schools in South Africa.

*Keywords:* Democracy, schooling, participative democracy, social media

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## **GLOSSARY**

<b>Acronyms</b>	<b>Meaning</b>
ADSL	Asymmetric Digital Subscriber Line
AJAX	Asynchronous Javascript & XML
ANC	African National Congress
C2005	Curriculum 2005
COSATU	Congress of South African Trade Unions
CSS	Cascading Style Sheets
DS	Design Science
DSRM	Design Science Research Methodology
HIV/AIDS	Human Immunodeficiency Virus / Acquired Immunodeficiency Syndrome
ICT	Information & Communication Technology
IM	Instant Messaging
INSET	In Service Training
IS	Information System
NAPTOSA	National Professional Teachers Organisation of South Africa
NDR	National Democratic Revolution
NEPI	National Education Policy Institute
NQF	National Qualifications Framework
OBE	Outcomes Based Education
RDP	Reconstruction & Development Program
RNCS	Revised National Curriculum Survey
RSS	Really Simple Syndication
SA Constitution	The Constitution of the Republic of South Africa, No. 108 of 1996.
SACP	South African Communist Party
SADTU	South African Democratic Teachers Union
SAOU	Suid Afrikaanse Onderwys Unie
SAQA	South Africa Qualifications Authority
SASA	South African Schools Act, No. 84 of 1996.
SGB / SGBs	School Governing Bodies
SMS	Short Message Service
SNS / SNSs	Social Networking Sites

<b>Acronyms</b>	<b>Meaning</b>
UGC	User Generated Content
USA	United States of America
XHTML	eXtensible Hypertext Mark-up Language which has to some extent been superseded by HTML5. A stricter and cleaner version of HTML (w3school.com).
XML	eXtensible Mark-up Language designed for transporting data (w3schools.com).
XMLHttpRequest	An object (coded component for use in coding applications) created by AJAX, used for exchanging data with a server behind the scenes (w3schools.com).
XSLT	eXtensible Stylesheet Language Transformation – the recommended stylesheet language of ZML. More sophisticated than CSS (w3schools.com).

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# 1 Introduction

## 1.1 Democracy

Many sources of reference claim that there is no universally accepted definition for democracy. However, there are two principles that any definition of democracy includes; The first, is that all members of the society have equal access to power and the second, that all members enjoy universally recognized freedoms and liberties. A variety of democratic systems of government have sought to limit or qualify the access and rights of members of society to those democratic principles. In spite of the collapses of many one-party communist states and the fall of authoritarian dictatorships, a United Nations study in 2002 found that in more than half the world's nations, the rights and freedoms of citizens are limited (UNDP, 2002). In the past year (2012) however, wide-spread revolts have erupted against dictatorial states and it appears evident that the utilisation of Internet enabled social media has freed the voices of societies and enabled public discourse in the pursuit of democratic freedoms. Hundreds of media articles have been written about the effect of social media in promoting what has become known as the “Jasmine Revolution” (Search key: 'jasmine revolution social media'). However, the extent to which social media may promote democracy is contingent upon the willingness of states to desist from monitoring their citizens' communications through those selfsame media and allowing discourse free from censorship (Kyriakopoulou, 2011).

Basic aspects of democracy such as “equal access to power” and “individual freedoms and liberty” are subject to degrees of application that spawn many variations of democracy. For example, the participative form of democracy is limited by the extent to which critical discourse may be conducted freely through the public sphere (Hacker & Van Dijk, 2000). Participative democracy is a combination of deliberative and representative democracy (Hacker & Van Dijk, 2000). Representative democracy is the model of articulating citizen demands through representation in the form of party-based parliamentary rule and functions primarily through elected representatives. Citizens express their preferences at elections, but policy is actually made by the representatives that the citizenry selects (Dalton, Bürklin, and & Drummond, 2001). Deliberative democracy “promotes the Internet as the means for an expansion of the public sphere of rational-critical citizen discourse – discourse autonomous from state and corporate

power through which public opinion may be formed that can hold official decision makers accountable” (Dahlberg, 2001). Numerous social interest groups and media organisations, from almost every country provide information regarding the state of democracy in their specific regions on a seemingly endless basis (Google search key: “Democracy survey” yields more than 64 million results). In countries that do have democratically elected governments, the battle for democracy tends to shift from electoral democracy to democratic freedoms for individuals (Hacker & Van Dijk, 2000). As a result, the pursuit, research and analysis of democracy is a persisting preoccupation of societies around the world. In this critical interpretivist study, the ethical rationale underpinning the research, is a value position in support of participative democracy.

## **1.2 Schooling**

Human mortality necessitates the education of the young for the survival of the social group. Whilst all communication within the social group is educative, the formal process of educating the youth is necessary to overcome the disconnection between the youth and the experienced members of the social group, caused by the complexities imposed by civilisation and the massive growth in the volume of knowledge. Agents for performing the tasks of educating the youth arise in the form of schools. Schools provide direction, control and guidance in the process of education to produce skills and learning as well as moral and emotional developments in the youth, that are relevant to the social group (Dewey, 1916). Many states, most notoriously the Nazi state of Germany prior to the Second World War and numerous Communist states thereafter had suppressed democratic activity in order to achieve social engineering through their schooling systems to provide human capital for their economic policies (Heyneman, 2000). South Africa too, has throughout its history, experienced concerted efforts at social engineering through undemocratic, state control of schooling (Dean, 2000). The performance of schools and the efficacy of education systems are the topics of numerous and continuing volumes of research, especially in the more developed countries. Due to the distinctly poor performance of South African schools under the new democratic dispensation (Lam, Ardington & Leibbrandt, 2008), intense research persists into every aspect of school education and remains a very high profile topic in the public media. The strategic rationale for this research is underpinned by the notion that schools may perform better in their given environments if their broader communities

democratically participate in supporting their schools (Sammons, Hillman & Mortimer, 1995), (Bauch & Goldring, 1998), (National Center for School Engagement, 2005), (Christie, Butler & Potterton, 2007).

### **1.3 Information Systems**

Technological innovations and advances have enabled more and more people to participate in not only discovering and accessing but also generating exponentially greater amounts of information to add to the sum of knowledge in almost every field of endeavour (Hilbert & Lopez, 2011). This burgeoning knowledge-growth situation confounds the connection between communities and their youth (Dewey, 1916). However, Dewey could likely never have imagined the scale of increase in the volume of knowledge that has occurred throughout the latter part of the 20<sup>th</sup> century and into the 21<sup>st</sup>. The “information society”, in which the majority of occupational activities are engaged in acts of information manipulation, first conceived of by Machlup (1962), has come to pass in many countries.

The Internet and technological advances in computerised devices for individual use, has interconnected society to an unprecedented extent and enables constructs of democratic behaviour, through information systems (IS), that would not have been possible previously (Hacker & Van Dijk, 2000), (Kersten, 2004), (Kyriakopoulou, 2011). Democratic practices over the Internet have proven to be successful and appealing when communitarian and liberal individualist models of democracy are applied but are much less so when applying the Internet to facilitate deliberative democratic practices (Dahlberg, 2001). At the time (2001), it was found that all attempts to implement sites that would promote the public sphere of rational–critical discourse through cyberspace, failed to gain a representative sample of the population. However, in the intervening years since Dahlberg's research, the development of Internet enabled social media (hereinafter referred to as simply “social media”), with a proven mass market appeal that is beyond anything experienced previously in terms of growth rate (Comscore.com, 2012) and popularity, have provided platforms upon which such deliberative democratic practices may be successfully based. In spite of the relatively recent advent of social media, its usage, design, application and social impact are the topics of extensive research (Google Scholar yields 3.4 million articles against the search key: “social media”) as its influence spreads to every section of society in most countries.

The proven advantages to be gained from democratic community participation in schools and the perceived potential for social media to enable participative democracy, raises the research question;

“What features would characterise an appropriately functioning, Internet enabled, social media-based artefact, designed to promote the democratic participation of communities in schools in South Africa?”

### **1.4 Research Questions**

Approaching the research question requires firstly, that the problems to be addressed by a social-media based artefact be clearly understood, so that relevant functional objectives of the artefact may be defined with accuracy. The persistence of failing academic performance (SADC & COMEDAFV, 2011) and the very poor results in comparative international assessment studies from learners tested across a wide range of schools in South Africa (Department of Education, RSA, 2009), (HSRC, 2011) indicates that there is likely an underlying, systemic situation effecting school education that still requires articulation and clarification. It appears from the content of the public discourse and numerous policy papers, that the education authorities adopt a reactive stance to dealing with problems as they arise by applying ad hoc solutions to problem situations in the schooling system, rather than addressing their causes. This implies that a preceding understanding of core problems facing the schooling system, including the underlying causes and their persistence, is required to determine whether democratic community participation is a solution and if so, how it may be directed to positively impact South African schools. In the context of that understanding, an insight would be gained into the major problem issues and the nature of the factors that allow them to endure. This necessary understanding ensures that any proposed IS solutions are positioned to deal with any circumstantial conditions of the underlying, causal factors whilst being deployed to address the problems facing the education system. The first issue arising from the overall research question therefore, is a determination of the fundamental problems facing South African school education and the underlying causes of their persistence.

Upon attainment of that understanding, a second question arises as to precisely how community participation may be applied to effectively achieve transformation of the schooling education system. The objective is to identify specific community-based actions in order to inform the



functions of enabling technologies and thereby provide the characteristics and criteria of an effective IS solution.

The next issue to arise in response to the overall research question, is the identification of a suitable, Internet-based social media technology for school communities. The school community context for evaluating the feasibility of any technology solution, is provided by the responses to the first two questions. In view of the plethora of social media available for public use, the possibility exists that a ready-made solution for the needs of school communities may be found within the ambit of the established social media artefacts. A preliminary evaluation focuses on criteria arising from the general school community context rather than specific functional needs to meet the democratic participation of communities in their schools. The rationale for this step is to determine whether an instantiation of an existing social media service could be deployed to provide basic, enabling technology and thereby achieve a research result that offers a quicker and more cost effective route to addressing the schooling problems in South Africa. The research question for a preliminary evaluation therefore enquires as to the extent that established social media are able to provide functions suitable for enabling community activities in support of schools.

The final issue arising, concerns the design and characteristics of an effective solution. If it were found that a feasible, ready made solution does exist, the focus would concern the issues of adaptation and deployment of the solution. In the absence of a feasible, established solution, the focus would concern issues of a solution design. In either case, whether adaptation and deployment or design, the solution would have to function in a public or social service context, which is fundamentally different from the social community contexts, based as they are on networks of friends or common affiliations, provided by the popular social media services. This new context would have to be defined along with the question as to what functions and design features are required of a solution to meet the needs of school communities.

Responses to the four issues arising from the overall research question, provide the answers to meeting the objective of this research.

### ***1.5 Overall Study Theoretical Framework***

The “Design Science Research Methodology” (DSRM), devised by Peffers et al (2008) to serve

as a guiding framework for research in IS and to support a proposal for “Design Science” (DS) as a research paradigm in IS, inspires the framework adopted for the overall study. The problem addressed by DSRM is based on the propensity for IS research to transcend the boundaries of the IS discipline more often than not (Avison & Elliot, 2005) and in the absence of an accepted design science framework, paradigms and methods developed for other more established disciplines, are adopted to the detriment of IS as a discipline (Peppers et al., 2008). The understanding of IS adopted for this study, is based on an aggregation of definitions found for the term “Discipline of IS”;

The practice of integrating ICT with humanity in a broad sense, unlimited by any type of organisation or categorisation of utility.

As such, IS research overlaps the hard sciences, economics and social sciences (Avison & Elliot, 2005). Understood in this context, there is often a natural inclination towards innovation and artefact design in IS. “Whereas natural sciences and social sciences try to understand reality, design science attempts to create things that serve human purposes” (Simon, 1969). The objectives of Design Science, as articulated by Henver et al., (2004), are to produce an “artifact created to address a problem” and is relevant to the solution of a “heretofore unsolved and important [business] problem” (Peppers et al.,2008).

The DSRM articulates a six step process for conducting design and development. The initial steps encompass all the activities that precede the design process and the latter stages encompass all the activities that follow the development process. In between, is a step designated as “Design and Development”. The six steps comprise the following;

Problem identification and motivation – Defining the specific research problem and justifying the value of a solution.

Define the objectives for a solution - Inferring the objectives of a solution from the problem definition and knowledge of what is possible and feasible.

Design and development - Creating the artefact. Such artefacts are potentially constructs, models, methods, or instantiations (each defined broadly) or “new properties of technical, social, and/or informational resources”. Conceptually, a design research artefact can be any designed object in which a research contribution is embedded in the design.

Demonstration - Demonstrating the use of the artefact to solve one or more instances of the

problem.

Evaluation - Observing and measuring how well the artefact supports a solution to the problem.

Communication - Communicating the problem and its importance, the artefact, its utility and novelty, the rigour of its design, and its effectiveness to researchers and other relevant audiences.

(Peppers et al., 2008).

Whilst the motivation for DS in IS has been ostensibly to “. . . create and evaluate IT artifacts intended to solve identified organizational problems”, it is conceded that the DSRM is only a general methodological guideline for DS research and variations would be required to perform DS with different organisational or motivational contexts (Peppers et al., 2008). This study adopts the initial steps of the DSRM to research IS in a community context.

The scope of this study does not extend to beyond the design of an artefact and as such does not follow the entire DSRM but is inspired by it.

## **1.6 Research Methodology**

The term methodology refers to the framework, paradigm, method(s) and techniques, used in the conducting of this study (Mingers, 2001).

### **1.6.1 Applied Framework**

As a conceptual design is the ultimate outcome of this research exercise, the adoption of the initial steps of the proposed DSRM paradigm is deemed appropriate. This study is structured in three phases that encompass the first two steps of the DSRM as well as the conceptual design phase of the third step.

Phase One is a critical evaluation of schooling in South Africa in which the fundamental problems of the education system and their underlying causes are identified and analysed and a solution to those problems in the form of democratic community participation in schools, is inferred.

Phase Two is an evaluation of established social media artefacts in order to determine the extent to which a solution lies in the adaptation of the deployment of existing social networking services to meet the fundamental functionality required of a solution to serve a social service community need, such as the school community addressed in Phase One.

Phase Three responds to the lack of suitability found in established social media artefacts in Phase Two and embarks on a critical interpretive evaluation of social media technologies to assess their feasibility and roles in a conceptual design of a new category of artefact, to address the specific requirements of a schooling community, articulated in Phase One.

### **1.6.2 Research Paradigms**

Regarding the research paradigms, this research concurs with Minger's (2001) view that in spite of the generally held view that research methods should be bound to particular paradigms;

“Paradigms are simply constructs of our thought. To hold that the world must actually conform to one of them is to commit the epistemic fallacy (limiting what may exist to our current knowledge) or, more generally, the anthropic fallacy (defining being or existence only in relation to human being) (Bhaskar 1978). The world is almost certainly more complex than we do, or possibly can, know.”

Accepting that paradigms are purely heuristic devices and that it is possible to detach research methods from a paradigm and use them, critically and knowledgeably, within a context that makes different assumptions to those normally associated with that paradigm (Mingers, 2001), is the stance taken in this research. Any research into aspects of the social world must inevitably have a critical potential in that the social world of meanings and practices (the object of social science) is intrinsically value-laden, and social research will inevitably question society's and individuals' self-understandings (Mingers, 2001). This research therefore draws on the strengths and weaknesses of established paradigms without being bound by their assumptions, theories and methods and thereby could form new paradigms appropriate to this research, to reflect the effects of the plurality and diversity of the world. Whilst each of the phases adopt research paradigms appropriate to its specific requirements, the overall study can be defined as a combination of critical and interpretive research.

### **1.6.3 Research Method**

This research adopts Mingers' (2001) perspective of pluralistic research methods which contends that methods provoke responses from the world and therefore the response is dependent both upon the world and the method. Different methods generate information about different aspects of the world, hence it is both desirable and feasible to combine together different research

methods to gain richer and more reliable research results.

A strong form of pluralist research (Mingers, 2001) is adopted in this study because it is evident from the multifaceted nature of the problem being researched, that the scope extends across the disparate disciplines of education, information systems and sociology. As the research exercise demands the outcomes of one research activity to provide input to another research activity, there is a phased logic to the entire process. Added to subject complexity and the interdependence of its phases, is the recognition that any single research method will not suffice for the differing natures of the phases of the problem being researched. Every phase of this research will therefore be applying a method, or combination of methods, appropriate to that particular phase. Mingers (2001) provides two arguments that justify the use of the strong form; The first is that the real world is ontologically stratified and differentiated requiring multi-method research to deal effectively with the full richness of the real world. The second argument is that a research study is not usually a single, discrete event but a process that typically proceeds through a number of phases posing different tasks and problems for the researcher. Noting that some research methods tend to be more useful in relation to some phases than others, so the prospect of combining them has immediate appeal. Even where methods do perform similar functions, combining a range of approaches may well yield a better result (Mingers, 2001). An outline of the execution of these mixed methods is articulated in the following description of the dissertation layout.

### ***1.7 Dissertation Layout***

Following this introduction, this study is organised into four chapters. Each phase, which are complete research exercises in their own rights, is presented in a separate chapter. This is followed by a chapter containing an overall summary and conclusion to the overarching study.

The objectives of the first phase, are to identify problems (Peffer et al., 2008) in the South African schooling system, determine their underlying causes and thereby deriving through inference, possible and feasible solutions (Peffer et al., 2008). This phase involves Foucauldian critical research (Orlikowski & Baroudi, 1991), (Myers & Klein, 2011). Foucault's social theory known as "history of the present" (Foucault, 1972) is adopted as the basis for interrogating the history of schooling through to the current circumstances to reveal the causes of persisting problems in school education. Foucault's "regimes of truth" theory (Foucault, 1972) guides the study to determine the effects that the exercising of the powers of the state, has on society

through the administration of education. Foucault's "regimes of practice" (Foucault, 1981) provides the means to a method for extrapolating how community practices of democratic school governance may provide transformation of the schooling system in South Africa. This First Phase covers the first two steps prescribed by the DSRM.

In the second phase, the emphasis is on the evaluation of established social media artefacts to determine their suitability as technological solutions for enabling community participation in school governance. The objective in this phase is to establish whether a solution sought for enablement of fundamental activities associated with community involvement in a social services context, such as democratic school governance, may be provided through an instantiation of an established technology (Peppers et al., 2008). Specifically, social media and the relatively new phenomenon of social networking sites (SNSs) are explored to determine what they are and how they function. This phase involves a contextual evaluation of the capabilities of selected SNSs to determine the extent to which these artefacts may be deemed suitable for providing the medium through which communities and social service organisations can engage with each other to facilitate effective interaction.

This second phase could be conducted neither in parallel nor independently of the first phase because some evaluation criteria in phase two that provide the context for the evaluation, result from the research into school communities performed in phase one. Although this inclusion of data pertaining to the communities in the evaluation process, provides an idiographic perspective to the research, the application of either action research (Baskerville, 1999) or case study research (Benbasat et al, 1987) methods in this phase are inhibited by the fact that this research precedes the formation of an Internet-based community that is representative of school governing communities and therefore an opportunity for participation by the subjects of the research could not be established. The research therefore adopts a context-based technology evaluation (Lewis & Wrage ,2005) wherein the researcher's ontological perspective is informed by the research into school communities completed in phase one.

The objective of the Third Phase follows on the determination from the Second Phase that none of the established social media artefacts provide the basis for a suitable solution, and is therefore an evaluation of the feasibility of utilising particular social media technology components to enable the various practices required to perform democratic school governance. Utilising a

seldom used critical interpretive research (Doolin & MacLeod, 2005) approach in a qualitative study (Lin, 1998), this phase entails the hypothesis of a networked community formed for the purpose of enabling social services in order to provide a conceptual community context for a goal-based evaluation (Cronholm & Goldkuhl, 2003). The evaluation involves the critical assessment of the practices required of School Governing Bodies (SGBs) identified in phase one, with the functional capabilities available in the various categories of social media technologies identified in phase two. The data resulting from the outcomes of both the first two phases are input into the third phase which involves a critical interpretivist approach to mapping the causal relationships between the two sets of data. This establishes which social media technologies or combinations and adaptations of technologies, provide the means to addressing the functional needs of school communities and how they may do so in compliance with participative democratic practices. This analysis results in the description of a design of a conceptual social media artefact suitable for the purposes of school communities. Both the Second and Third Phases of this study are in conformance with the first part of the third step in the DSRM, namely determining whether the solution is an instantiation or innovation of technology where “new properties of technical, social, and/or informational resources” are designed (Peppers et al., 2008). Responding to the primary objective of this multi-phased study, conclusions drawn from the resulting description of a design of a conceptual IS, provide an assessment of the features that would characterise a social media artefact to enable the establishment and promotion of democratic community participation in schools.

As this design is derived from a research process, the work thus far, qualifies to be deemed to be in compliance with DSRM (Peppers et al., 2008).

As a result of the dependence of each subsequent phase on the completion of the preceding phase for input data, this study is defined as a sequential form of the pluralist research methodology (Mingers, 2001).

**PHASE 1**

**Schooling and School Communities in South Africa: A  
Critical Analysis**



## **2.1 Introduction**

The failure of the school education system in South Africa is pervasive across all the provinces, cities and towns of the country and endures over decades. This widespread and persistent situation indicates a systemic problem which precludes this study from adopting a narrowly focused, school centred approach that would typically use empirically-based research methods such as case study research, in favour of a critical analysis of documentation pertaining to various aspects of the wider schooling situation, sourced from both the academic sphere and the public discourse. Within the context of the overarching study, the objectives of this phase of the study are to identify problems in the South African schooling system, determine their underlying causes and thereby deriving through inference, possible and feasible solutions.

Adopting a Foucauldian critical analysis, this phase analyses the historical roots of problems facing schooling and school communities in South Africa, to determine transformational objectives. Upon identifying the major challenges bedevilling both the education system and the communities, the research analyses the role of the state, through the exercise of administrative powers in the form of legislation, in the persistent failure to address and solve those problems. The study reveals that the underlying cause of the persistence of the problems lies with the ideological conflicts within the ruling ANC Tripartite Alliance. This finding motivates the search for a solution that lies within society and the communities. The critical research is therefore extended to determine the extent to which democratic participation by communities in their schools may serve to emancipate the communities from their problems and challenges. The analysis reveals a list of 5 practices that communities may adopt to effect democratic school governance.

### **2.1.1 Literature Review**

Apartheid education imposed damaging policies resulting in long term effects on schools and communities ( Johnson, 1982), (Nel & Binns, 1999), (Dean, 2000). However, since the long awaited democratic dispensation in 1994, vastly insufficient numbers of employable school leavers have been produced by the system (Bhorat, 2004). While the matriculation or National Senior Certificate is still considered to be the minimum qualification for further training for employment or higher education, it is characterised by its reducing value due to the general

perception of a lowering of standards for pass marks, mistrust in the efficacy of the education system and the adjustment of marks by the Quality Council for Schools, known as “Umalusi” (The Witness, 2011). Empirical evidence confirms that the quality of learner's basic literacy and numeracy skills are poorer than in the past (Lam, Ardington & Leibbrandt, 2008). While education for the Black majority is burdened by massive structural and institutional inequalities resulting from the Apartheid education system (Dean, 2000), the huge expenditure on education since the ANC government came into power, has been seen to be ineffective at reversing the situation due to poor curriculum policies and militant teacher unions (Bloch, 2010).

In 2008 it was revealed that the schooling system suffered a 54% drop-out rate before matric level was reached and some sources in a ministerial report indicate even higher levels (Ministerial Committee on Learner Retention in South African Schooling System, March 2008). The majority dropped out after grade 9 (Mail & Guardian Online, 2008) and only 60% of the remaining learners achieved a pass rate in matric. Therefore, as at 2008, the system could achieve only a 27% success rate in completed schooling education of the youth. The significance of the year 2008, is that it was the first year in which learners had graduated through the new curriculum, known as Curriculum 2005 (C2005) which had been phased in 12 years previously (Sunday Times, 2009). While the state of education in South Africa since 1994 fails to deliver on the promised benefits of democracy in terms of either adequately educated learners or effecting redress of past inequalities (Harley & Wedekind, 2004), (Lam, Ardington & Leibbrandt, 2008), (Nel & Binns, 1999), (Anderson, Case & Lam, 2001), (Chisholm, 2004), (Perry & Arends, 2003), (Bhorat, 2004), the response has been to focus on reviewing the curriculum itself rather than on any of the underlying issues. The curriculum is viewed as an instrument of both social change and educational achievement by broad layers of the society (Report of the Review Committee on C2005, 2000). It therefore carries political as well as educational objectives and is consequently aligned to policies favoured by the government of the day. The exercising of ideologically motivated political objectives has led to the formulation of the South African Qualifications Authority Act (1995) which seeks to equate education with training, as a means to effecting fast redress of the effects of the Apartheid system on work opportunities and economic activity. Ideologically, it also seeks to equalise all institutions of education by measuring success through only the measurement of predefined, standardised outcomes (SAQA, 2013). Aligning the school education system with this ideological stance, has impacted on curriculum

formulation through the adoption of Outcomes Based Education or OBE (Harley & Wedekind, 2004), (Christie, 1996), (Muller, 2004), (Jansen, 2002), (Chisholm, 2004) with the consequentially adverse effects on school performance. Upon the review of the curriculum, in spite of many voices to the contrary, politically powerful influences ensured that the Revised National Curriculum Statement (RNCS) retained OBE (Chisholm, 2003). Following continuing years of poor results, reviews were focused on the problems with the implementation of the curriculum rather than the curriculum itself (Report of the Review Committee on Curriculum 2005, 2000), (Report of the Task Team for the Review of the Implementation of the National Curriculum Statement, 2009).

However, as long as the situation prevails that the majority of children (73 out of every 100 in 2008) who enter the schooling system, are unprepared for employment or further education when they exit the system, the state will be required to direct an unsustainable level of support in the form of social benefits and assistance to the growing numbers of unemployed. The situation strongly indicates that the symptoms of the problems are being addressed rather than the problems themselves and therefore raises the question;

“What are the fundamental problems facing South African school education and what is the underlying cause of their persistence?”

The failing education system has a deep impact on South African society. Over the 5 year period 2006/07 to 2010/11, South Africa's GDP had grown by 51.93%. Over the same period, spending on education had grown by 80.81% and on social support by 71.24% (Department of National Treasury Department, Republic of South Africa, 2007, 2011). The effects of the majority of school leavers not having the necessary skills to either enter basic employment, undertake vocational training or enrol for further education, are increasing the numbers of people dependent on the state, resulting in low levels of economic activity and growth rates.

South Africa may be defined as a welfare state with 15 million social grant recipients out of a population of 49 million (Department of National Treasury, 2011). With limited funds and increased welfare payments in their various forms, the state's ability to fund its core functions of governance, basic services, health care, education and security, will be increasingly compromised. Social unrest due to violent and disruptive protests against poor services delivery by the state has become a common and persistent occurrence since the dawn of our democracy

(Atkinson, 2007). This unrest factor, coupled with rising discontent amongst growing numbers of unemployed youth, exposes the country to a potentially explosive threat of widespread social instability. Under these systemic circumstances, the roles of school communities in the success or failure of the schooling system is examined. Socially cohesive school communities are necessary for successful schooling education (Heyneman, 2000). Social cohesion is achieved through democratic practices and creates conduits for the social osmosis that overcomes the disconnection between social groups and their youth (Dewey, 1916).

The positive influence of community participation in successful schools has been affirmed both internationally (Sammons, Hillman & Mortimer, 1995) and locally (Christie, Butler & Potterton, 2007). Whilst community involvement in democratic systems of school management and governance is proven to be a most effective mode of participation (Wohlsetter et al, 2003), (Sheldon & Epstein, 2002), (Bauch & Goldring, 1998), (Comer & Haynes, 1991), the implementation of democratic participation in school governance in South African schools, with the notable exceptions of former model C schools that were reserved exclusively for white children under Apartheid and private schools, is largely ineffective (Smit & Oosthuizen, 2011), (Van Wyk, 2007), (Lewis & Motala, 2004), (Lewis & Naidoo, 2004), (Mncube, 2008), (Mncube, 2009).

In view of the failing state of the school education system and the confirmation in principle, of the potential for democratic community participation to address problems with the schooling system; this study assesses the extent to which underlying factors inhibit the capacity of communities to provide solutions to under-performing schools through effective school governance and identifies the practices which may effect change and transformation. The second research question of this study is therefore;

“How may democratic participation of communities in support of their schools, lead to transformation?”

### **2.1.3 Layout of the Remainder of this Chapter**

The following section addresses the Research Method adopted for this phase. Firstly the formulation of a method that complies with a Foucauldian critical research paradigm is devised. A strategy for executing the method in compliance with needs of critical research is followed by descriptions of the data collection, including an analysis of data sources, and analysis processes

in conformance with the social theories of Foucault (referred to in italics and quotation marks).

Thereafter, the research processes and their results, executed in compliance with the Foucauldian critical research paradigm, proceed as follows;

- 1) The history of schooling in South Africa is analysed from a “*history of the present*” perspective in order to determine the consequences of the exercise of state powers on schooling education over time and identifying thereby the problems that characterise the failing education system and deriving from them in turn, the objectives for achieving transformation.
- 2) The powers presently exercised by the state are analysed by interrogating “*discursive formations*” comprised of the policies and legislation, inclusive of the ideological motivations behind them and determining their consequential effects on school education in South Africa. The extent to which different policies enacted by the government either promote or inhibit democratic principles are determined in order to expose, on reflection, the prevailing “*regimes of truth*” constructed by the state.
- 3) The potential for the exercise of democratic participation by communities in the affairs of their schools, is established by adopting Foucault's theory known as “*regimes of practice*” (Perrot, 1981) to analyse community capacity to support their existence and functioning. Analysis of practice are performed from the perspectives of four dimensions. The ontological perspective of the concept of school governing bodies, the deontological perspective of the policies and legislation affecting schooling and school governance, the perspective of the ascetic adoption of governance practices by communities and the teleological perspective of specific practices and functions to achieve transformation in schooling and schools. Thereby, a multi-faceted, coherent understanding of the requirements of communities adopting participative democratic school governance is achieved.

This phase of the research is concluded with the drawing of conclusions that identify the practices to be adopted by communities to address the needs for achieving social emancipation through the transformation of education.

## **2.2 Theoretical Framework**

A failing of the schooling system in South Africa that is so widespread and evident in so many respects, indicates problems at the systemic level of the state. The aim therefore is to identify the problems and understand the underlying causes for their persistence in South African schooling education and establish how emancipation may be achieved through democratic social change. This process requires reflective and critical consideration (Doolin & MacLeod, 2005) of the reality of South African schools as revealed through the research, in order to clearly identify the problems facing it, understand the underlying causes for their persistence and infer from those findings, if and how transformation may be achieved by democratic participation of communities in support of their schools.

The requirement of critical theory demands that emancipation is the distinguishing feature of the research (Dean<sup>1</sup>, 1994). The desire of critical research is to expose inadequacies in society and reflect upon emancipation from those inadequacies (Brooke, 2002).

The theoretical framework applicable to a critical research is dependent upon the social theories being pursued. The focus therefore shifts to the selection of a social theorist or theorists, to determine the shape of the framework.

### **2.2.1 Selecting a Critical Social Theorist**

It is recommended that critical researchers should organize their data collection and analysis around the core concepts and ideas from one or more critical social theorists (Myers & Kleyn, 2011). For clarity of the explanation of choice, a comparative process of justification is employed. For that purpose, the social theories of Habermas and Foucault were considered as either provide theories which could be suitable for providing strategies for exploring the topics of this study. From a philosophical perspective, Habermas' social theory is based upon morality achieved through consensus and Foucault's is based upon real history exposed in terms of conflict and power (Flyvbjerg, 1998). Whilst the application of either critical theory in research entails the three elements of insight, critique, and transformative redefinition that Alveson & Deetz (2000) suggest are fundamental to performing any critical research (Myers & Kleyn, 2011), four factors decided in favour of adopting Foucault's social theories for this research. Justification of the choice of Foucault over Habermas is extrapolated upon in the following appraisals of the component parts of the framework.

### **2.2.1.1 Theoretical Approach**

Firstly, the focus of the research. Whilst Habermas' theory relies on achieving insight to the understanding of a social problem through the distilling of consensual conclusions out of an analysis of public sphere information, it suffers the risk of insufficient information due to inhibiting influences of power exercised to restrict or dilute the public discourse. In South Africa a history of state suppression of press freedom was ended with the arrival of the new democratic dispensation in 1994 but once again a battle is being waged to protect press freedom from state control and manipulation (Mail & Guardian, 2012). The underlying causes to a problem may therefore be obscured. The Foucauldian theory referred to as "*history of the present*" obtains insight and understanding through interrogation of the historical progress of state authority exercising powers in a process of conflict with society. History extends to the present and the analysis of "*discursive formations*" that reflect the conflicts in the exercising of power, are more likely to reveal the underlying causes of problems existing in the present, than would an analysis of a public discourse that may be influenced through state or institutional manipulation. As the problem of the failing education system is pervasive across the country, any empirically-based, localised research would be inadequately narrow for a systemic problem and Foucault's discursive formations provide an ideal method of interrogating texts that reveal the truth behind the motivations and mechanisms of state powers that cause the prevailing situation.

### **2.2.1.2 Data Sourcing**

Secondly, the sourcing of data. Habermas' theories are generally based upon accessing the public sphere for discourse data (Myers & Kleyn, 2011). The public sphere, as conceptualised by Habermas, encompasses political parties, politicians, lobbyists and pressure groups, mass media professionals and the vast networks of electronic and print media that focus on informing and transforming public opinion (Cukier et al, 2008). Whereas the meaning of discourse in Foucault's theories refers to an extended piece of text (written or verbal) that is governed by rules and conventions of which the user is largely unconscious and influences the rules of thought of various "*discursive formations*" (Myers & Kleyn, 2011). It is notable that Habermas' public sphere includes neither academia and academic research nor philosophical and ideological texts. The understanding of what encompasses the public sphere as opposed to the private sphere is inconclusive and the definition accorded to the public sphere by Habermas (1989) has been

refuted by alternative views in numerous studies. Nevertheless, the position adopted in this study is that academic studies and philosophical texts are excluded from the public sphere because they fail to meet one of the three “institutional criteria”, namely inclusivity, upon which the public sphere for discourse is based (Habermas, 1989). As this study sources the larger portion of its data from the academic sphere and interrogates “*discursive formations*” comprised of both philosophical texts and the policy documents spawned under their influences, a Habermasian study seems inappropriate. Given that the topic of research addresses a problem situation that prevails across the entire country, and is therefore of a systemic nature, data sourced from academic studies on issues in schooling education at a national level cannot be excluded.

### **2.2.1.3 Data Organisation**

Thirdly, the organisation of the data. Foucault's method known as the “*archaeology of knowledge*”, whereby examining the discursive traces left by the past in order to understand the processes that have led to what we are today (Foucault, 1972), provides an appropriate approach to the study of education in South Africa which suffers under the legacy of past policies. In Foucault's theory, the general context of archaeology is that of a history of the present. The “*history of the present*” may be loosely characterised by its use of historical resources to reflect upon the contingency, singularity, interconnections, and potentialities of the diverse trajectories of those elements which compose present social arrangements and experience (Dean<sup>1</sup>, 1994). Extracting the truth about a prevailing situation requires the compilation of “*discursive formations*” of texts reflecting the motivation and exercising of state powers that may reveal the “*regimes of truth*”. Data concerning social practices that may empower society to emancipate itself from any adverse effects and conditions imposed by state powers, are gathered to inform “*regimes of practice*”. The sourced data is therefore categorised into the three interrelated themes required to perform a Foucauldian critical analysis; history, power structures and transformation for social emancipation (Myers & Klein, 2011). This organisation of data facilitates an analysis to challenge “every abuse of power, whoever the authors, whoever the victims (Miller, 1993)” (Flyvbjerg, 1998) and in this way “to give new impetus, as far and as wide as possible, to the undefined work of freedom (Foucault, 1984)”. Conversely, Habermas postulates the pre-existence of conditions for effective “discourse ethics” and “communicative rationality” that would deliver the truth by “the force of the better argument” (Flyvbjerg, 1998).



Consequently, data would not be organised in pre-determined themes but would rely on the emergence of themes through force of argument applied to data derived from the public discourse.

#### **2.2.1.4 Data Analysis**

The fourth is the focus of the data analysis. The preference of the critical research theory of Foucault over Habermas, rests upon the emphasis that Foucault places on the analysis of modern forms of authority that constitutes the task of an on-going critical inquiry. “Foucault’s historical analyses lead us to critically reflect upon the conditions of contemporary existence, both in the sense of the organizational practices we seek to explore and of our own research practices in doing so” (Brooke, 2002). Foucault’s critical history forsakes the critique of the past in terms of the truth of the present but not the critical use of the history of reason to diagnose the practical issues, necessities, and limits, of the present (Dean<sup>1</sup>, 1994). An emphasis on authority derived from the power of the state provides the means of exposing the underlying causes of a social problem situation. Foucault's method addresses questions to three broad domains: first, one of reason, truth, and knowledge; secondly, one of power, domination, and government; and finally, one of ethics, self, and freedom, collectively forming the ‘Foucauldian triangle’ of *truth, power* and *self* (Flynn 1987), (Dean<sup>1</sup>, 1994). Habermas however, does not commend analysis of authority as the Habermasian view is of an idealistic authority reduced to a written constitution that defines the rules for democratic process (Flyvbjerg, 1998).

## **2.3 Research Method**

### **2.3.1 Research Paradigm**

Within the pluralist research methodology of the overarching study, this phase adopts a critical research paradigm, based upon Foucault's social theories. “Walsham (1993) and Boje (2001) remind us that critical theory should be carefully distinguished from both positivism and interpretivism as they tend to focus on description and understanding rather than on emancipation and the importance of values and assumptions at the individual level” (Brooke, 2002). Myers & Klein (2011) concur that their principles for conducting interpretivist research are inadequate for critical research as they do not deal with the additional elements of critique and transformation.

In compliance with the requirements of critical research, the elements of insight, critique of power structures and transformation for social benefit (Myers & Klein, 2011) are addressed in this study by following the research strategy outlined below. Foucault never sought to apply a particular system or to allow his own heuristics to congeal into a fixed, formal method (Dean<sup>1</sup>, 1994).

Without conforming therefore to any specific predefined method, a systematic, thematic, interrogation is performed primarily of non-public sphere data in the form of ideological texts, policy documents, legislation and academic, peer-reviewed papers but also from public sphere data sourced from surveys and press reports. Inductive, deductive and dialectic reasoning is applied to varying degrees in critically analysing the data within the themes established for the specific purpose of this research.

### **2.3.2 Research Strategy**

Following the critical research paradigm, this strategy pursues a three step process that

- interrogates history to gain insight to the present and exposes thereby, specific problems arising from past conflicts between the state and society and deriving from them, the relevant transformational objectives
- exposes the power structures and critiques their philosophical motivations and the impacts of the policies spawned by them, to understand the underlying causes for the

state of the present

- identifies the route to transformation and the practices to achieve emancipation through democratic social action.

Firstly, in accordance with a Foucauldian view of critical analysis (Myers & Klein, 2011), a thematic review of the historical and social context of the community, provides an understanding into the historically foundational circumstances of school communities. These historically founded circumstances provide an *insight* into the social, economic and demographic challenges requiring redress and the schooling problems resulting from them in the present. This establishes the basis for deriving the transformational objectives against which the effects of current policies and actions in the South African education system under the democratic dispensation, are assessed in the final analysis. The social activity of schooling is contextualised within the concepts of the entities of '*the state*' and '*society*'. Through the establishment of the connection between historical factors and how they result in the present circumstances of schooling in South Africa, the "*truth*" about the effects caused by past and current exercising of "*power*" is exposed for analysis. From this analysis, knowledge emerges that informs action that can lead to emancipation for the individual "*self*".

Secondly, through analysis against the tenets of democratic practice, an assessment of the effects of contending ideologies within the state and the resulting influences of politically formulated policies on the schooling system and therefore on the community, a *critique* on the "*power*" structures that lie behind the current state of the schooling system, is achieved. The aim of this phase of research is to challenge the policies that control schooling education and the supporting knowledge that has become accepted as "*regimes of truth*" through the exercising of the political power that imposes them (Foucault, 1972) and revealing the consequential impact upon social emancipation for the individual "*self*" within communities. The texts of relevant ideologies and the policies emanating from them, together form "*discursive formations*" about the rules of thought (Foucault, 1972) from which "*regimes of truth*" may be derived. Since knowledge is "*power*", this discursive formation as a collection of texts represents the power at work (Myers & Klein, 2011) in the field of school education in South Africa. The extent to which democratic practices correlate with individual ("*self*") emancipation is elucidated upon as a precursor to this analysis. The conclusions drawn from this analysis provide the response to the first research

question; What are the underlying causes for the persisting failure of South African school education?

Thirdly, by analysing the policies extended by the “*power*” of the state that regulate school governance and the actions needed to effect participation in a democratic system of school governance, the potential for practical individual emancipation or freedom for “*self*” and social transformation through the adoption of inclusive, participative democratic practices, is substantiated. Using a process of dialectic reasoning, possible solutions to the key problems identified are assessed against the ethics of participative democracy by SGBs. The conclusions drawn from the tabulated results represent an understanding of the community through the identification of the underlying causes of its problems and of the actions and activities, defined as “*regimes of practice*”, required by it to achieve transformation. These conclusions provide the response to the second research question; How may democratic participation of communities in support of their schools, lead to transformation?

Figure 1, depicts this method as a framework for conducting Foucauldian critical research.

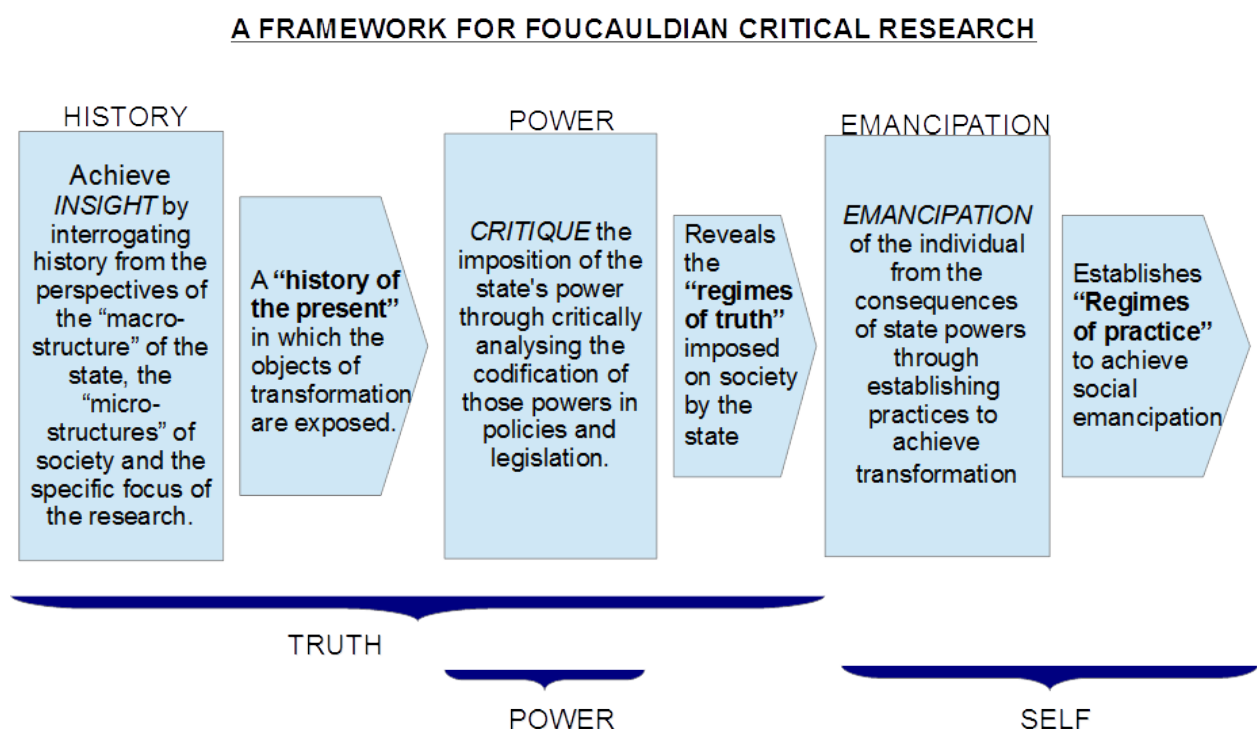


Figure 1

### **2.3.3 Data Collection**

The systemic nature of the schooling problems in South Africa implies that data sourced for the study be gathered from sources that are reflective of issues that address the factors that have a generalised influence on the education system as a whole. The factors are therefore those concerning historical and current national policies and the curriculum. Data pertaining to schooling performance are obtained from sources reflecting collations and analysis of empirical data compiled from national surveys. In this study, any localised, empirically-based research focused around individual schools are specifically avoided as South Africa is a country where the demographic disparities between schools, even in the same towns, could offer very divergent results. Therefore the sourcing of studies based on narrowly scoped, localised situations are avoided for purposes of obtaining nationally relevant results.

The national scope of the research restricts the data collection to a literary research and review, followed by relevant documentary analyses. There is a broad scope and an extensive volume of prior research carried out into every aspect of education in general (Google Scholar provides 88,000 articles containing “School education” in their titles) and a wealth of researched data available on topics about South African schooling education. All data for this phase of research are sourced from academic papers, government policy documents, survey material, the media and specific published works about ideological philosophies and social theories. The sourced data is categorised into the three interrelated themes required to perform a Foucauldian critical analysis; history, power structures and transformation for social emancipation (Myers & Klein, 2011).

The sources of data reviewed for this research phase are categorised into

1. ideological documents
2. legislation
3. peer-reviewed papers and academic publications
4. surveys and reports
5. media articles

Observations and interpretation of legislation and policy documents provide empirical data about

the current exercising of state powers effecting the activity of schooling. Further empirical data is sourced from contemporary surveys and reports based on the prevailing situations related to various aspects of the state of education in South Africa.

Table 5 contains an analysis of all articles by themes, sub-themes and sources. Sources of articles are denoted by numbers relating to the above list.

The Data Sources Analysis reveals the following about factors pertinent to the major themes of Foucauldian critical research;

- History –
  - The historical past from the beginnings of formal schooling in South Africa up to the end of Apartheid education is covered through academic research only
  - Post-apartheid education is covered through academic research, empirical data from surveys and statements obtained through the public media discourse.

This distribution of data sources over time, where historical, pre-democracy material is obtained purely from academic research but post-apartheid education legacy problems are identified and confirmed through information obtained from the academic sphere, empirical surveys and the public media discourse, provides corroboration for the view that the effects of Apartheid education have not been addressed but continue in the present time with the issues persisting in the public discourse.

- Power – The process of developing and exercising political power and influence, as well as its impact on education in South Africa through the formulation and implementation of policies, is revealed through systematically organising data into themes. These themes begin with basic beliefs that in turn spawn consequential actions in a cascading process to effect power. The thematic arrangement pursues steps that reflect the underlying philosophical or ideological beliefs, political doctrine and strategy, policy execution through legislation, policy outcomes through curricula documents, academic studies on contending ideologies and academic studies on the impacts of policies on school education in South Africa, as follows;
  - Step 1: Addressing the political philosophies. 2 Primary texts, one on democracy

and the other on communism as well as 3 secondary texts provide the fundamental understanding of the contention between the two philosophies.

- Step 2: Interrogating political doctrine emanating from the political philosophies is facilitated through 2 documents, one expounding on the political strategy called the National Democratic Revolution and the other, the first policy framework of the ANC entitled RDP (The Reconstruction and Development Programme). This interrogation provides an understanding of the drivers of policy formulation.
- Step 3: 6 relevant policy documents provide the means to interpret the effect of political doctrine through the exercising of legislative power.
  - The South African Qualifications Authority (SAQA) Act, No. 58 of 1995, is selected as it is the enactment of the ideological notion that equates training with education.
  - The National Qualifications Framework (NQF) Act 67 of 2006, is selected as it is the manifestation, through a common assessment framework, of the ideological view that equates education with training.
  - The Labour Relations Act, 66 of 1995, is selected because it legislates for a network of protective procedures through which unionised educators may be protected against dismissal for non-performance of their tasks.
  - National Education Policy Act, 27 of 1996, is selected as it clarifies the extent to which the minister of education is empowered to politically formulate education policy in accordance with provisions of the country's Constitution and the Act itself.
  - South African Schools Act, 84 of 1996, is selected as it details the extent to which communities may participate in the democratic governance of their schools and assume control over most factors impacting on school performance.

- Employment of Educators Act, 76 of 1998, is selected as it provides not only for the conditions of employment of educators but also the right of dismissal for either incapacity or misconduct.
- Step 4: The two national curricula formulated under the legislated policies are assessed through 2 academically researched works.
- Step 5: The impact of the two contending philosophical regimes are analysed with reference to 2 doctrinal commentaries and 3 academic papers.
- Step 6: The impacts of the policies on education in South Africa are assessed with reference to 8 academic papers on the topic and 2 reports compiled from empirically surveyed data.

The distribution of data sources confirms that a substantial body of research is available on various aspects of the topic concerning the impacts that the exercising of state power has on school education in South Africa. The process followed provides the basis for a comprehensive analysis of the contending ideologies that motivate the exercise of political powers through legislation and their effects on schooling in South Africa. These data provide the source of a response to the first research question posed for this phase of the research by enabling an analysis that reveals the underlying causes for school education failure in South Africa.

- Transformation for the benefit of society through the emancipation of the individual is pursued through;
  - Interrogating 9 academically researched papers on the topic of democratic school governance and 1 policy document that legislates the functioning of school governing bodies in South Africa. The policy document is the South African Schools Act, 84 of 1996 (SASA) and more specifically the School Governing Bodies Policy (contained within SASA).
  - Assessing the effects of policies on the transformational objectives is achieved through the analysis of data from 3 political philosophical texts, 7 policy documents, 13 academic research papers, 3 reports compiled from empirically researched data and 2 media reports. The political philosophical texts are two texts concerning the



National Democratic Revolution and the Universal Declaration on Democracy 1997. The 6 policy documents are the Labour Relations Act, 66 of 1995 and various Amendments (LRA), the National Education Policy Act, 27 of 1996 (NEPA), the South African Schools Act, 84 of 1996 (SASA), Curriculum 2005 (C2005), the Revised National Curriculum Statement (RNCS) [2] and the National Qualifications Framework, 67 of 2008 (NQF). All of these policy documents provide the opportunity to critique some aspect of the prevailing influence of state powers on transformation in the education system in South Africa. They consequently provide the means of producing empirical results from credible analysis about the general state of the education system in South Africa.

The response to the second question posed by this phase of the research is provided by the analysis that details how practices that enable democratic participation of communities in support of their schools, may lead to transformation.

## **2.4 Data Analysis**

### **2.4.1 Civil Society and the State**

Performing a critical analysis requires a grasp of the concepts of civil society, power and the state. Empowering civil society is a central concern of the project of democracy (Flyvbjerg, 1998). Civil society has an institutional core constituted by voluntary associations that exist outside of the sphere of the state and the economy. Habermas (1992), lists institutions such as churches, cultural associations, sports clubs and debating societies to independent media, academies, groups of concerned citizens, grass-roots initiatives and organisations of gender, race, and sexuality, all the way to occupational associations, political parties and labour unions amongst examples of civil society (Flyvbjerg, 1998).

The conflict between the state and society whereby the state exercises its power through its ability to enforce control, has assumed various interpretations in respect of the modern state; Michael Mann (1988) offers a distinction between the despotic power of the state wherein the “range of actions which the élite is empowered to undertake without routine, institutionalised negotiation with civil society groups”, and the infrastructural power of the state wherein there exists the “capacity of the state to actually penetrate civil society and to implement logistically political decisions” (Dean<sup>2</sup>, 1994).

Giddens (1985) however, rejects the notion of civil society as that which is “outside of the state”, arguing that there is in principle nothing which is outside the scope and reach of the modern administrative state in the same way that there is in “traditional states”. Through its exercise of administrative authority in structures such as offices, factories, schools and universities, hospitals, and prisons, the state extends its domination in a variety of localities which Giddens refers to as “containers of power” (Dean<sup>2</sup>, 1994). They generate power by the concentration and combination of the administrative mastery of both the material world and human beings. The nation-state can thus be regarded as a power container in which the ‘administrative purview corresponds exactly to its territorial delimitation’ (Giddens, 1985).

Offering a contrary view of the exercising of state power, Corrigan & Sayer (1985) argue that “moral regulation is coextensive with state formation”. They theorise that state formation effects cultural transformation through the mechanism of moral regulation. Moral regulation is imposed

through the normalisation and naturalisation of the premises of a specific social order. It concerns the meaning of state activities for the constitution and regulation of social identities and subjectivities as viewed from a Marxist philosophical perspective. The state therefore establishes the moral framework within which self-regulating communities exist. The obvious contradiction in the theory arises from the necessary state imposition of its morality upon self-governing individuals (Dean<sup>2</sup>, 1994).

Foucault suggests firstly, that administered state power are necessary conditions for the capitalist organisation of production and, secondly, that relations of power and authority, working through disciplinary techniques, are ‘infrastructural powers’—in Mann’s sense—of the state. Foucault describes more of a ‘state-effect’ rather than the state itself for the state does not have a kind of quasi-naturalistic historical existence but is something that is the result of a composition of more primary forces and relations. Foucault also describes micro-macro relations in the state in terms of “codification”. He says that the ‘State consists in the codification of a whole number of power relations which render its functioning possible (Foucault, 1980)', (Dean<sup>2</sup>, 1994). The term “codification” identifies the state with law, the juridical instance and juridical discourse. “Codification” is a second-order phenomenon, presupposing a greater agency or power that organises and collects together the elements that will function as a code. Strategies are employed to render society and its various “microstructures” amenable to government and administration, to render it governable and administrable (Dean<sup>2</sup>, 1994).

### **2.4.2 History**

History is researched in order to achieve an insight into effect that past policies, under the undemocratic Apartheid system, had on the development and social circumstances of school education in South Africa, that persist through to the prevailing post-Apartheid education. Instead of seeking to use documents to reconstruct the historical reality that lies behind and beyond them, Foucault asserts that the route to defining a history is to bring the positive reality of discourse into focus and attempt the description of its systems of formation (Dean<sup>1</sup>, 1994). In order to illustrate the formation of the present over time, the sub-themes under the main theme of History are defined by their position on the timeline of school education in South Africa, from inception to the present. This process reveals the “*history of the present*” through a deductive process of recognition and assessment of causes and effects of historical events and

circumstances.

Sub-themes for analysing the history of schooling in South Africa are;

“Early community, missionary and state schooling” informs the research about the foundations of formal schooling in South Africa.

“Apartheid education and its legacy” in order to determine the problems for education resulting from the exercise of state powers under the policies of Apartheid and thereby establish objectives for social transformation.

“Post-apartheid Education” in order to determine the effectiveness of policies under a democratic dispensation to meet the transformational objectives.

### **2.4.3 Power**

Power structures are researched in order to assess who, within the structure of the state, wields what power, how the power is exercised in relation to contending social and political values, in this case democracy and communism, and in what way it is exercised to create Foucault's “*regimes of truth*”. Firstly, under the theme of Power, the “*discursive formations*” that shape rules of thought that motivate action in the exercise of power, are interrogated. Secondly, as “power is exercised by the state, which itself consists in the codification of a whole number of power relations which render its functioning possible - Foucault, 1980” (Dean<sup>2</sup>, 1994). Foucault describes relations of power and authority, working through disciplinary techniques, as ‘infrastructural powers’ of the state (Dean<sup>2</sup>, 1994). The power for the super-structure of the state to dominate through the control of the micro-structure of individuals is examined in the context of the conflicting philosophies of communism and democracy. Communism representing the state's inclination to undemocratically dominate and impose itself on the one hand and democracy representing the individual's right to self determination on the other. Thus the state brings together, arranges, and fixes within that arrangement the micro-relations of power (Dean<sup>2</sup>, 1994). This process reveals the “*discourse formations*” that underpin the “*regimes of truth*” surrounding school education in South Africa.

Sub-themes for analysing Power are;

“Primary Philosophical Texts” are texts written in the time and experience of the writers themselves. In the case of philosophical texts it would be the works of the originating philosophers. These documents inform the beliefs and motivations of adherents in their

exercising of power.

“Secondary Philosophical Texts” are texts which refer to or are commentaries about primary texts. Foucault's (1972) *Archaeology of Knowledge* refers to this distinction and the usage of primary and secondary texts. Secondary texts serve to add clarity and explanation to primary texts.

“Political Doctrines” are the doctrines arising from the beliefs motivated by the philosophies followed by those wielding political power. In the situation where the state comprises of an alliance of different political movements rather than a single politically homogeneous party, the texts contained in the political doctrines of those exercising power reveal the extent which contending philosophies may dominate in the formulation of legislation.

“Legislation” is the instrument through which governments exercise power over their citizens. Foucault contends that the truths generated about ‘society’ and ‘economy’ are gradually enshrined in law, one of multiple regulatory means by which truth governs the population (Bastalich, 2009). Where contradictions in legislation are exposed, they may indicate underlying conflicts in ideology.

“Curriculum 2005” is a policy document governing education in South Africa and is implemented within the structures created by the legislation. An outcome of the exercise of power.

“Revised National Curriculum Statement” is a later policy document devised to repair the problems arising from the Curriculum 2005. These curricula represent the codification of the state's power with regard to schooling in the present history.

“Contention between Democracy and Communism” provides a critique of the contending philosophical motivators of state action.

“Impacts of Policies on Education” provides insights into and critique of the extent to which the exercise of power has promoted or inhibited transformation in school education in South Africa. Empirical data is gathered through critically assessing the extent to which selected policies and legislation impact on the functioning of the education system.

#### 2.4.4 Transformation

Transformation is researched in order to assess practices that may be adopted by society to effect social emancipation for the individual by addressing transformational objectives. Foucault (1981) refers to “*regimes of practice*” in this regard as organised systems of practices rationalised according to particular forms of knowledge.

“the history of a morality has to take into account the different realities that are covered by the term. A history of ‘moral behaviours’ would study the extent to which actions of certain individuals or groups are consistent with rules and values that are prescribed for them by various agencies... a history of ‘codes’ would analyse the different systems of rules and values that are operative in a given society or group... a history of the way in which individuals are urged to constitute themselves as subjects of moral conduct would be concerned with the models proposed for setting up and developing relationships with the self, for self-reflection, self-knowledge, self-examination, for the decipherment of the self by oneself, for the transformations that one seeks to accomplish with oneself as object” (Foucault, 1985).

An analytic of practices can thus be worked out along four dimensions or sub-themes according to Foucault (1985) (Dean<sup>3</sup>, 1994):

- 1) An ontological dimension, of what we seek to govern in ourselves or others by means of this practice.
- 2) A deontological dimension, of what we seek to produce in ourselves and others when governing this element.
- 3) An ascetic dimension, of how we govern this element, with what techniques and means. This would be a worldly ascetism as postulated by Max Weber (1905) as a practice of discipline and restraint in the pursuit of salvation or liberation where “the highest form of moral obligations of the individual is to fulfil his duty in worldly affairs (Giddens & Held, 1982).
- 4) A teleological dimension, of the aim of these practices, of the kind of world we hope to achieve by them, of the kind of beings we aspire to be (Dean<sup>3</sup>, 1994).

## ***2.5 Insight – The History of schooling in South Africa pre 1994***

### **2.5.1 Early community, missionary and state schooling**

Schooling as a formal concept was introduced to South Africa by English migrant settlers during the 18<sup>th</sup> century. Prior to the arrival of the English, the Dutch hardly provided any form of formal schooling until the 18<sup>th</sup> century with some church-based elementary schools run by itinerant teachers. 2 schools for children of slaves were also established (Johnson, 1982). This era precedes the formation of unitary state and therefore has no direct bearing upon the critique of the history of state powers imposed upon education.

The first formation of a state in the form of a colony under the British empire followed. The British saw schooling as a means of promoting their policy of “Anglicisation of the Boers” when they arrived in 1806 and a formal system of education was established. British, Christian missionaries were prepared to serve their faith in the role of teachers and through them, the system of schooling education was provided to black African people in South Africa for the first time. In 1812 the British established a system of free schooling and in 1866, the language of English was made compulsory in 1<sup>st</sup> and 2<sup>nd</sup> Class schools in the Cape. The Cape Education Act, No. 13 of 1865, legislated that 1<sup>st</sup> Class schools were schools located in “chief towns” and 2<sup>nd</sup> Class schools were located in “lesser towns”. The funding allocated to 1<sup>st</sup> and 2<sup>nd</sup> Class schools ensured the teaching of a wide range of subjects with compulsory English language instruction. 3<sup>rd</sup> Class schools were located in rural locations, received less funding, taught fewer subjects and did not encompass compulsory English language. The Boers, located in the rural areas, saw this as a move to keep them (The Boers) from advancing socially and economically, relative to new settlers arriving from Europe and they resisted by rallying around the 3<sup>rd</sup> Class schools to preserve their language (Johnson, 1982). Education had therefore evolved to be one of the instruments or structures through which the colonised state exercised its power. As the state was neither a traditional state nor a nation-state or even a unitary state, Foucault's view of a state-effect (Dean<sup>2</sup>, 1994) rather than any specific form of state is more apt for understanding the historical exercise of power over what was a colonised territory at the time.

In 1853, the British embarked on a policy of “civilising rather than fighting” the indigenous peoples and supplied state support to missionaries to provide schooling to the poorer classes. By

1891, about a third of the white children in the Cape were educated in missionary schools which were completely racially mixed (white, coloured slave children and indigenous black children) (Johnson, 1982).

However, the discoveries of gold and diamonds in the Boer colonies resulted in the bitter Anglo-Boer war (1889 to 1902) and the strong rise in Afrikaner Nationalism (Oakes, 1988). Prior to the war, the education landscape was altered because the Afrikaners and poor white people saw themselves in competition with black people for economic and social opportunities. The British withdrew their support for black education and a policy of segregated education was instituted, undoing the progress of the previous 50 years. This policy of segregated educational funding lasted until the 1980's (Johnson, 1982).

The first unitary state in South Africa was established with the formation of the Union of South Africa in 1910 as a self-governing colonial state following the Anglo-Boer wars (Oakes, 1988). This unitary state could by no means be considered to be a nation state as it encompassed peoples who were ethnically and culturally diverse in many ways. The colonial authority, Britain, imposed its rule of law on this diverse society and the state supported Britain in 2 subsequent wars.

With their ascent to political power in 1948 in the aftermath of the Second World War (1939 to 1945), the Afrikaner Nationalist government instituted the policy of Apartheid for the upliftment of the Afrikaner people and the system of Apartheid Education resulted in 1951 (Christie & Collins, 1982). Their education system was referred to as Christian National Education which served to manipulate society to fit their own peculiar interpretation of Christianity – which in many respects contradicted the tenants of the Christian faith which espouses neighbourly love as one of its two foundational laws (Mark 12: 30-31, Matthew 22: 39 and Leviticus 19: 18). It was characterised by a centralised, authoritarian system, rote-learning, and an unquestioning allegiance to nationalist and Calvinistic ideologies, as expressed by the White minority National Party government (Nel & Binns, 1999). It was designed to break the influence of English-speaking missionaries who controlled and owned the Black schools and subscribed to an integrationist view of society with equal opportunity in education (Christie & Collins, 1982). The English speaking schools managed to resist the Apartheid education doctrine through the control of some of the provincial departments of education but with the passing of the National



Education Policy Act in 1967, the control of education policy was centralised and imposed upon all state schools. The policy of segregation was completed when dual medium (English and Afrikaans) schools were done away with on top of the racial segregation (Johnson, 1982).

### **2.5.1.1 Apartheid Education**

Apartheid education for Black children acquired the additional stigma of being so-called ‘Bantu (or Black) education’. It was by design an inferior system, compared with that for White children, and was one geared to producing a labour class at a low cost to the state. The system was also effective in the suppression of what had been a very significant system of missionary and church education for Blacks, because of their ideological conflict with the state. Average class sizes, which were up to three times greater for Blacks than Whites, and large funding disparities between different racial groups were retained. One of the results of these inequalities was gross differences in the marks attained by students in their final school-leaving certificates. Pass rates of less than 50 per cent were common in Black schools, compared with pass rates frequently in excess of 90 per cent in White schools (Nel & Binns, 1999), (Kallaway, 2002).

### **2.5.1.2 Long-term effects of Apartheid education policies**

When democracy dawned on South Africa for the first time in April 1994, the objectives for transforming education in a democratic state could reasonably have been defined in terms of the problems inflicted by the system of Apartheid. In an undemocratic system, the individuals in society were not equal before the law under the Apartheid system as different laws were applicable to different members of society according to their race. Although the subject of Apartheid education has been given scant attention by historians and educators (Kallaway, 2002), the effects of the system are referred to generally in almost every article on South African education. The state of education for the black majority was described succinctly by Dean (2000) as follows;

“ - - - -

- an inadequate teacher education system, particularly in black colleges of education
- the structural legacy of Apartheid divisions : eighteen separate, racially-defined education departments
- black children in classes often as large as 100

- disaffected and under-qualified black teachers
- a rigidly-defined, politically-driven history curriculum prescribed by whites for blacks, used as an element of control and as a rationale for the racist model of Apartheid
- no culture of problem-solving, free enquiry or active learning: the prevailing model, fundamental pedagogics, was technicist, rigid, authoritarian and conservative. Apartheid education for blacks had successfully suppressed teachers' and pupils' intellectual and analytical abilities (Walker, 1990)
- the destructive influence on schools of the power struggle (between civil society and the state)
- chronic underfunding of black schools

All of these problems were bequeathed by the divisive, unequal and fragmented education system that for half a century prior to 1994, had failed to adequately educate the majority of the country's people. There was a high drop out rate among black school children linked to widespread poverty and social alienation, coupled with a lack of provision for over one million children" (Dean, 2000).

It is evident from the aforementioned that South Africa, through successive regimes of government, had developed a tradition of undemocratic political interference in education as a method of social engineering to meet the narrow objectives of undemocratic, political ideologies.

### **2.5.2 Transformational Objectives**

The social imperative for transformation in a democratic state would be to reverse any negative situations or conditions persisting in the present state, to the benefit of the society as a whole and especially for those previously disadvantaged by historical circumstances. Identifying transformational objectives, aligns this study with the element of transformation which is core to the conducting of critical research (Myers & Klein, 2011). The transformational objectives pertaining to school education in South Africa are deductively derived from the problems, revealed by Dean (2000), created through the Apartheid education system. They include the following;

1	Universal school attendance for all children
2	Improved teacher training
3	Solution to disaffected and under-qualified Black teachers
4	De-racialisation and consolidation of Administrative structures
5	Improved learner performance in formerly Black schools
6	Reduction of drop out rate in formerly Black schools
7	Reduced class sizes
8	Increased funding of formerly Black schools
9	Depoliticised and balanced history curriculum
10	Adoption of a teaching culture promoting problem-solving, free enquiry and active learning
11	Removal of destructive influences on schools of the effects of the power struggle

Figure 2 is a representation of a Foucauldian view of this assessment of the history of education in South Africa. The history of South Africa from the perspective of schooling education, demonstrates how the history of social activities such as schooling is closely intertwined with the course of the history of the state and the exercising of its authority over society. The diagram illustrates the status of the macro-structure of the state at the time of specific events in history, the general reality for society as a collection of micro-structures at the same time and the consequential, coinciding reality for the specific micro-structure that is education. The need for emancipation is expressed as commentary on the extent to which each structure deviates from the principles of democracy for individuals.

This diagram aims to illustrate the tension between the state and society and the outcome that the effects of the ideological, political and social factors have on the social activity of school education. The historical events on the timeline from the inception of formalised schooling in the colonial era, through the various developments which finally arrives at the current education system in a democratic country, depicts the Foucauldian concept of “*History of the present*”.

**The History of Education in South Africa (Late 18<sup>th</sup> Century to 2008)**

**FOUCAULDIAN HISTORICAL ANALYSIS**

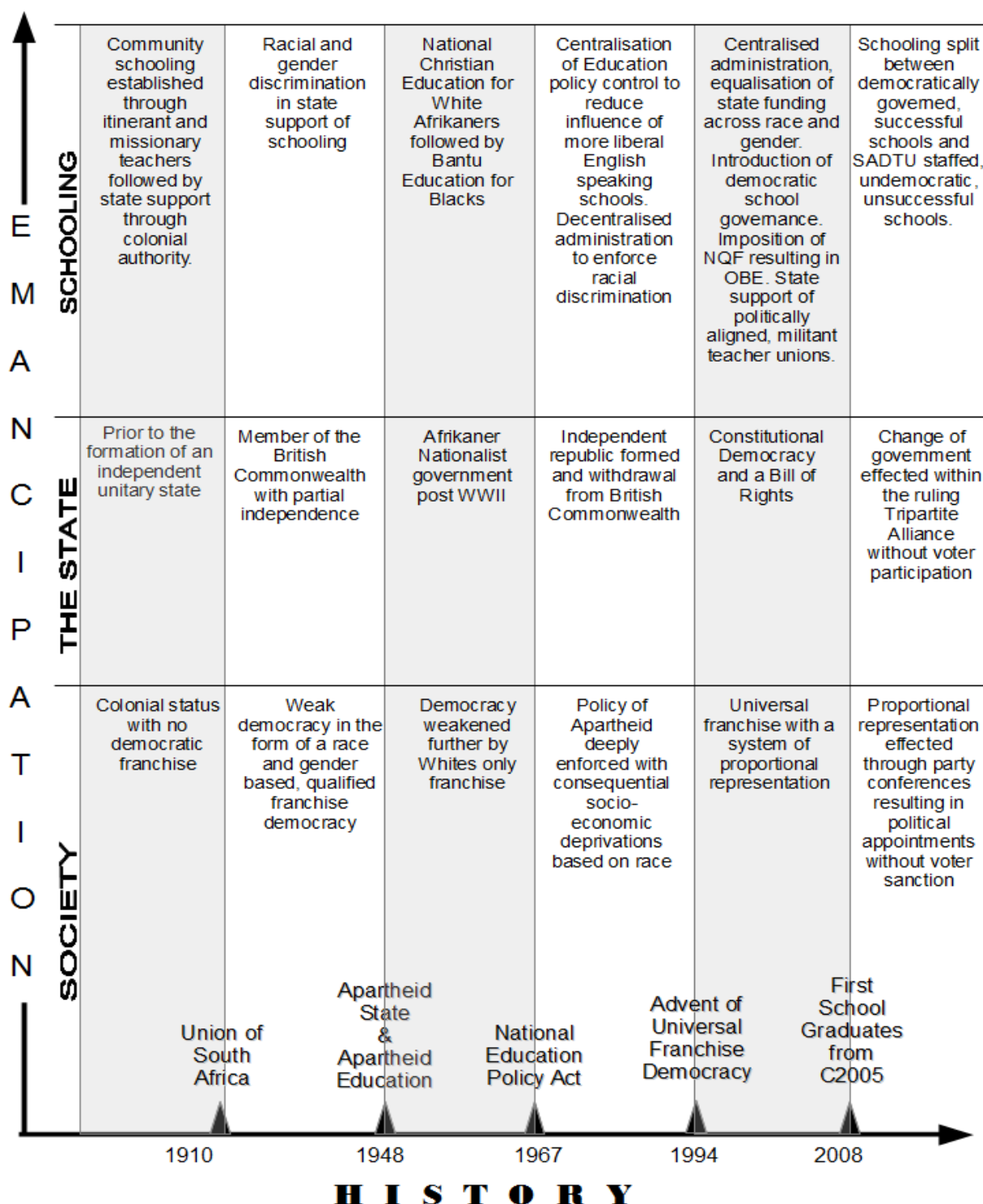


Figure 2

## **2.6 Establishing new “regimes of truth” - Restructuring Education in South Africa post 1994**

The need to restructure the education system in South Africa to serve the interests of the majority was an urgent imperative for the new democracy (ANC, 1994). Balancing the contending ideologies of the ANC's tripartite alliance (ANC\*, 2011) against the proven decentralising philosophy of progressive pedagogy adopted by educational institutions and educators who had achieved considerable success in the faculties of education of the liberal universities and in the private and later Model C schools (Muller, 2004), needed careful consideration. Avoiding of the risk of “throwing the baby out with the bath water”, would require wisdom and foresight. Researching academic studies, empirical data surveys and the public discourse on the topic of South African education since the restructuring post 1994, reveals that the schooling system is failing to deliver on its core mandate of producing appropriately educated school leavers who are ready to participate in the economy and become useful citizens (Lam, Ardington & Leibbrandt, 2008), (SADC & COMEDAFV, 2011), (Department of Education, RSA, 2009), (HSRC, 2011). For the majority of learners in South Africa, the Apartheid system has imposed on them a legacy of social and family circumstances that require high levels of corrective action and support in order to overcome their disadvantages (Nel & Binns, 1999). In attempting to ensure that the system provides the required redress, the policy-makers have erred by imposing a political ideology on the process that advocates that vocational training needs and educational learning needs are combined into a single National Qualifications Framework with contentious assessment and qualification standards (Muller, 2004), (Chisholm, 2004). That this framework is retained in spite of its obvious failings (Allais, 2007) may be because it has proven to be expedient to the ANC's adopted strategy of absolute control (Hoffman, 2010), known as the National Democratic Revolution (Taborsky, 1967) (Slovo, 1987). Curriculum development under these ideological influences has not produced successful models and both the Curriculum 2005 (C2005) and its successor the Revised National Curriculum Statement (RNCS) have proved to be inadequate for the needs of the country (Lam, Ardington & Leibbrandt, 2008).

### **2.6.1 Critical Analysis of Power Structures and Policies**

In this analysis, Foucault's concept of “*regimes of truth*” are applied to distil the truth out of

collections of topically related texts that form “*discourse formations*”. The contending forces that underlie the power structures at play in the battle for influence over education in South Africa are the socio-political philosophies of democracy on the one hand and Marxism on the other. Adopting the historiographic distinction between primary and secondary texts, as favoured by Foucault (Foucault, 1972), Aristotle's “The Athenian Constitution” (Rackham, 1922) would be considered the primary text on democracy. Whilst an absolute definition of democracy evades agreement, the statement from Abraham Lincoln's “Gettysburg Address” (1863) that described democracy as; “Government of the people, by the people, for the people .....” is often used to define it. Similarly, The Communist Manifesto (Marx & Engels, 1848) is the primary text on communism. Communism is a doctrine conceptualised over a century ago as a philosophy that provides the means to gain political power through undemocratic means, in undemocratic societies. It propagates the mass deployment of labour in a class struggle with their employers (oppressors), in an otherwise fantastical environment of stability where change and innovation is kept at bay and the need for mass labour, as an homogeneous concept of a collective of individuals who are totally lacking in self-ambition but motivated to selflessly serve the collective, is never-ending (Marx & Engels, 1848). The fundamental conflict between democracy and communism revolves around the normative ethical (behavioural ethics) and moral codes with which they each comply. Secondary texts which through their reference to primary texts create commentary on them, provide the insight into the points of contention between the two philosophies. Defined in terms of normative ethics, which is a philosophy of defining what is morally right and what is morally wrong, democracy complies with the normative ethical theory of consequentialism (Anscombe, 1958). Consequentialism contends that actions are to be morally evaluated solely by their consequences whilst Marxist communism complies with the deontological normative ethic (Broad, 1930) which contends that actions are to be morally evaluated solely by consideration of agent's duties or the rights of those whom the actions concern or both. Communism and democracy therefore cannot co-exist without the one undermining the other.

The purpose of this analysis is to provide a critique of the political power structures and the policies imposed by them, on schooling in South Africa and to determine the extent to which the formulation and implementation of those policies have adhered to either participative democratic or undemocratic principles and processes . The extent of participative democracy in this analysis

is determined by the level of accessibility to the decision making processes by members of society in general. This analysis is premised upon John Dewey's (1937) summation of the keynote of democracy as a way of life, which he expresses as, “the necessity for the participation of every mature human being in formation of the values that regulate the living of men together: which is necessary from the standpoint of both the general social welfare and the full development of human beings as individuals.”

The outcomes of the analysis is presented in Table 5. A critical interrogation of ideologically imposed policies and doctrine effecting education is performed in order to determine the extent to which policies may have been spawned under the influence of communism on the one hand and to assesses the extent to which they comply with the tenets of democracy, on the other. By assessing the impact of these policies on the functioning and performance of education, conclusions may be drawn regarding the impact of the power of the communist influence on the democratic functioning of institutions of the state and society.

The analysis categorises the relevant policies by deductively identifying the political partner in the governing Tripartite Alliance that provides the ideological basis for each policy. A critical and reflexive assessment of each policy's compliance with democratic principles is performed followed by a deductive assessment of the impacts of those policies on the functioning of education in schools in South Africa. The analysis reveals that influences of contending legislation tend to limit the community's ability to effectively exercise its rights in democratic school governance.

### **2.6.2 Critique of the Power Structures and Policies**

This critique is an *a posteriori* commentary resulting from the critical analysis of power structures and policies. The analysis, presented in Table 5, reveals the structural fault within the Tripartite Alliance that facilitates the exercising of contending influences of the pro-democratic, centre-left ANC (ANC\*\*, 2011) and the undemocratic, far-left Communist and pro-socialist COSATU (Cosatu, 1998), on government policy-making, without the participation of the broader society. The structure of the state in this instance has enabled the far-left parties to assume extensive power in a covert manner simply through the act of being party to an alliance with the politically dominant ANC. Voting trends indicate that it is likely that the ANC will retain power for the foreseeable future (HSRC, 2005), (Habib & Naidu, 2006), largely through the sentiment

of the formerly oppressed Black majority, for whom the ANC represents political liberation.

The far-left have leveraged their position in the alliance through engineering the adoption of the Communist inspired National Democratic Revolution (NDR) (Taborsky, 1967), (Slovo, 1987) by the ANC Tripartite Alliance, which led to the formulation of the National Qualifications Framework (NQF) within the South African Qualifications Authority (SAQA) in 1995. The aim of the NQF is to eliminate perceived artificial divisions between mental and manual labour by means of a centralised qualifications grid. The “worker's agenda” is promoted through a system that equalizes the qualifications of the proletariat with their class opponents, the salariat (Muller, 2004). The Labour Relations Act (LRA) of 1995 enables COSATU to wield a powerful voting block through its membership in democratic processes and as a non-democratic militant force through the deployment of industrial action, strikes and demonstrations to enforce the objectives of the NDR. Their affiliate teacher union, SADTU, is consequently continuously involved in union activities and industrial action, to the detriment of effective education of learners. Whilst the NQF provides the legislated basis for the employment of under-qualified educators in fulfilment of the cadre-deployment policy promoted by the NDR, the LRA creates a barrier to correcting errors of employment revealed through under-performing educators. The ideological stance of the NQF was also imposed upon the formulation of the curricula, resulting in the adoption of Outcomes Based Education (OBE) in both C2005 and its successor, RNCS.

By contrast, the South African Schools Act (SASA) and National Education Policy Act (NEPA), enacted in 1996, enable the implementation of democratic practices within education. However, the influence of the undemocratic, Communist aligned faction within the Tripartite Alliance apparently ensures that the objectives of the NDR carry greater influence and are pursued regardless of the cost to society. The failure of the school education system is a very significant part of that cost and it seems unlikely that the power of democracy exercised through the ballot, will be sufficient (HSRC, 2005), (Habib & Naidu, 2006) to achieve social emancipation in education. This structural fault encompassed in the composition of the Tripartite Alliance represents the underlying cause for the persistent failure of school education in South Africa and motivates the quest for solutions that are not dependent upon the state to transform itself but rather on society to grasp the means to its own emancipation.



## **2.7 SGBs: “Regimes of Practice” for Emancipation and Social Transformation in School Education**

Foucault's (1981) “regimes of practice” (Perrot, 1981) are organised systems of practices rationalised according to particular forms of knowledge. The analysis of the participation of school communities in the functioning of their schools, is therefore shaped and rationalised in accordance with ontological, deontological, ascetic and teleological perspectives.

The ontological basis, meaning the specification of a conceptualisation (Gruber, 1993), for adopting the practice of SGBs, is established in the next section. By critically investigating relevant state legislation that specifies how the practice of SGBs is to function and interrogating local and international research into the practice, its validity as an effective practice is determined.

A deontological perspective which aims to reveal the extent to which the state and communities promote their moral obligation of enabling effective SGBs, is sought through analysing the impacts of ideologically conflicted legislation by the state on the capacity of SGBs to practice their roles to achieve transformational objectives. This analysis is presented in the section entitled “Policy Impact Assessment for Transformation: A Deontological Perspective”.

An ascetic perspective of SGB practices is sought, which in this instance refers to an adoption of an attitude of worldly ascetism by communities, to achieve transformation in the school education system in South Africa. By deducing which specific activities may be adopted by committed (disciplined, restrained and prepared to undertake ascetic self-denial if necessary) SGBs to achieve transformation and establishing to what extent these activities are permissible by the state through a process of matching them to enabling clauses within the democratically inspired SASA, the ascetic perspective of the practice of SGBs is analysed. This deductive analysis is presented in the section entitled “Participative Democracy in School Communities - Transformation for Social Benefit”. Worldly ascetism, as postulated by Max Weber (1905) is a practice of discipline and restraint in the pursuit of salvation or liberation where “the highest form of moral obligations of the individual is to fulfil his duty in worldly affairs” (Giddens & Held, 1982). However, the social inequalities that exist in South Africa due to the past policies of Apartheid, provide an unequal school community scenario wherein formerly White schools

perform well but most formerly Black schools fail to perform even adequately. Further research is therefore performed to identify the socio-economic and socio-political factors that inhibit the formation of effective SGBs in formerly Black schools and thereby provide qualifying data to the ascetic perspective of SGB activities. The outcomes of this further research is contained in the section entitled “Socio-economic and Socio-political Factors Inhibiting the Adoption of School Governing Bodies in South Africa”.

Finally, a teleological perspective whereby specific practices of SGBs are identified which may give effect to the kind of world that we hope to achieve by them, is presented in the analysis entitled, “Practical Functions to Promote Transformational Objectives”.

### **2.7.1 Establishing the Ontology of the Practice of Democratic School Governance**

Through the SGB protocol contained in SASA, policy makers acknowledge that the state is unable to provide a workable education system on its own and requires the participation of communities. The move towards making schools more democratic, through the legislative empowerment provided by SASA, offers hope in the creation of space for communities to play significant supportive roles in their schools (Smit & Oosthuizen, 2011). Internationally, where community support is strong and effective, research indicates that schools tend to be successful (Sammons, Hillman & Mortimer, 1995) and specifically that democratic school governance leads to an improvement in education (Wohlsetter et al, 2003), (Sheldon & Epstein, 2002). In South Africa, a similar trend is demonstrated in the former Model C schools which tend to produce effective education in spite of the curriculum shortcomings (Nel & Binns, 1999). However, in most of the dysfunctional schools, the community support and management catered for in the SGB framework, do not work effectively for either the educators (Mncube, 2008), the learners (Mncube, 2008) or the parents (Lewis & Motala, 2004), (Mncube, 2009). Although a disconnect between “theory-in-use” and “theory-in-action” regarding SGBs is highlighted by Lewis & Naidoo (2004), they also draw attention to the fact that the shortcomings in community participation in schools are centred on the effective implementation and practice of the policy, rather than the policy itself. Broadly based research therefore tends to validate the notion that the enablement of the practice of effective participation of communities in the governance of their schools can improve the education of the learners at those schools and establishes the ontological basis for the practice of SGBs.

## **2.7.2 Policy Impact Assessment for Transformation: A Deontological Perspective**

The analysis presented in Table 8, assesses the impact of the various policies, including the SGB policy, on the transformational objectives arising from the historical and social circumstances pertaining to schooling in South Africa. The purpose is to substantiate the extent to which SGBs may be effective transformation agents within the context of the policy environment on education. (The Transformational Objectives are numbered in accordance with Table 1.) A dialectic process is employed in this analysis where assessments are made of the means provided by various policies to answer the questions posed by the transformational objectives. The analysis provides a critique of the extent to which ideologically conflicted legislation serves to inhibit the deontologically inspired practices of SGBs.

This analysis reveals that the current policies have had a positive effect on 4 of the transformational objectives. Objective No. 1; Universal school attendance, had almost been entirely successfully achieved by 2001. Objective No. 4; De-racialisation and consolidation of administrative structures, has been completed but some of the structures have been made ineffective due to personnel appointments being made in line with political affiliations in adherence with the NDR, rather than measures of competence and fitness for the tasks. Objective No. 8; Increased funding to Black schools, has improved to the point that school funding has been equalised across all schools. Objective No. 9; Achieving a non-racial and balanced history curriculum, is a work in progress and seems to be able to proceed without impediment under current policies.

Consequently, the Policy Impact Assessment reveals that 7 of the 11 transformational objectives are not being achieved. This Policy Impact Assessment, whilst substantiating the potential for a system of participative democracy applied through SGBs to positively impact the attainment of the transformational objectives of schooling in South Africa, highlights the failure of SGBs to do so.

The analysis further exposes the negative impact that centrally imposed, ideologically driven, non-democratic policies can have upon the attainment of the transformational objectives. Democracy and democratic participation are very much part of the decentralisation discourse. In employing decentralisation in the service of democracy, South Africa aligns itself with the

Universal Declaration on Democracy (UDD), which states that:

Democratic institutions and processes must also foster decentralised local and regional government and administration, which is a right and a necessity, and which makes it possible to broaden the base of public participation. (UDD 1997: Para 23)

All of the policies supporting the advancement of the NDR have a negative impact on education by inhibiting the democratic school governance processes that could effect action to achieve transformation. However, the legislation enacted in SASA and NEPA provide communities with the power to pursue the implementation of democratic practices within education. How this may be achieved in the face of centrally controlled, anti-democratic forces are addressed in the following section.

### **2.7.3 Ascetic Practices of Participative Democracy in School Communities - Transformation for Social Benefit**

The necessary legislative changes that would focus the powers of the state on the promotion and facilitation of participative democratic practices in school communities, is unlikely under the current ruling alliance in South Africa. An alternative therefore is to identify how participative democratic activities within civil society may be able to circumvent the stifling effects of the far-left inspired NDR aligned policies. Supporting research indicates that effective, democratically functioning SGBs could provide the means to transformation. It therefore follows that if the communities were prepared to adopt an ascetic attitude towards the practice, the progress towards transformation would be advanced. Analyses are therefore performed to assess both the extent to which current legislation facilitates such practices and the impacts that socio-economic and socio-political circumstances may have on their adoption.

The analysis in Table 9 reveals the extent to which the SASA legislation enables the ascetic adoption of effective practices of SGBs to achieve their transformational objectives, if they sought to do so. Through this deductive analysis it is ascertained that the legislation governing the functioning of SGBs empowers them with the authority to address 9 of the 11 identified transformational objectives.

However, SGBs, whilst functioning well in formerly White model C schools, tend to not do so in formerly Black schools (Nel & Binns, 1999). The facts tend to indicate that negative socio-economic and socio-political factors resulting from the system of Apartheid and the struggle against it, still persist in many respects in the formerly Black communities. A resulting lack of social cohesion and knowledge of democratic practices within school communities inhibits their effective participation in their schools. Therefore, in spite of the enabling legislation and policy contained in SASA for effectively functioning SGBs to address the transformational objectives, communities generally fail to apply the legislation ascetically. Whilst the influence of inhibiting legislation contained in NQF and LRA is not discounted, research also identifies the following socio-economic factors contributing towards the failure of SGBs to function effectively in most formerly Black schools;

- Teacher and pupil absenteeism (Nel & Binns, 1999), (Department of Education, 2004).
- Lack of education or capacity of parents to effectively fulfil SGB roles (Van Wyk, 2007).

- The lack of public transport, the distance between place of residence and the school and time of SGB meetings (Van Wyk, 2007).
- Poverty and the prevalence of HIV/AIDS inhibit the communities from using their social support networks for the purpose of building structures within the school (Van Wyk, 2007).
- Parents often misconceive participative democracy for political democracy and misunderstand the role of the school governing body (Smit & Oosthuizen, 2011), (Lewis & Motala, 2004).
- Misunderstandings by principals, educators and parents about their roles within SGB structures (Van Wyk, 2004).
- Denial of the rights of learners to fully participate in SGBs by adults, especially in township and rural schools (Mncube, 2008).
- Gender bias inhibits women from playing meaningful roles on SGBs (Mncube, 2008).
- Low levels of education, lack of information about the functioning of SGBs and fear of victimisation of their children inhibit parental participation in SGBs in some schools (Mncube, 2009).

It is therefore concluded that the democratically aligned influences within the state have legislated for the adoption and practice of democratically functioning SGBs in all schools. However, the socio-economic and socio-political circumstances of the majority of school communities in South Africa impact negatively on the capacity of communities to adopt these practices with discipline, restraint and an ascetic commitment to self-sacrifice and self-denial, in the fulfilment of their parental obligations to their children, to overcome the obstacles that deny their transformation.

#### **2.7.4 Teleologically motivated Practice to Promote Transformational Objectives**

A teleological perspective of SGB practice is pursued by assessing the factors which inhibit the attainment of transformational objectives to achieve a better society, and making a determination about specific activities that may overcome those inhibiting factors. Through a process of dialectic reasoning, the previously identified factors of obstructive legislation, socio-political and socio-economic circumstances, are considered and assessed in order to determine what actions by school communities would be appropriate for achieving transformational objectives. This analysis intends to illustrate how adherence to the school governance practices envisaged for SGBs in SASA, could empower communities, enabled by appropriate communications and collaboration systems, to achieve transformation for an improvement in their social circumstances. Consequentially effective schooling could result in school leavers who are employable and therefore able to contribute materially to the general upliftment of their communities through productive economic activity. This economic activity could in turn, lead to transformation and emancipation from circumstances that sustain impoverishment.

The first set of practices required, may be considered generally applicable practices based upon the pragmatic use of information and communication resources, whether electronic or not, to effect the establishment of democratically functioning SGBs. The epistemological basis for these practices are determined firstly; by reflecting on what kind of SGBs may be established and secondly; reflecting on how communities should go about establishing them. The responses to the questions arising from this reflection are;

- a) The kinds of SGBs allowed by the SASA legislation as it legislates for democratic school governance.
- b) Through democratic processes involving dissemination of information, opening channels for community discourse and inviting and encouraging community collaboration (Hacker & Van Dijk, 2000), (Dahlberg, 2001), (Kyriakopoulou, 2011).

The following generally applicable practices are derived from a process of dialectic reasoning whereby the researcher has posed questions and provided reasoned answers that reflect the researcher's own knowledge and perceptions about the SASA legislation, SGBs and democratic



practices.

These questions posed by the researcher in Table 2, are aimed at revealing a teleological perspective of democratically functioning SGBs;

TABLE 2: RESEARCHER QUESTIONS FOR TELEOLOGICAL PERSPECTIVES	
QUESTIONS	RATIONALE BEHIND THE QUESTION
How would communities become aware of SGBs?	SGBs are entirely dependent upon optimal community participation to function democratically. South Africa already suffers the debilitating consequences of SGBs being misrepresented as party political instruments (Smit & Oosthuizen, 2011), (Lewis & Motala, 2004). Therefore, a focus upon the methods required to create community awareness of the real purposes and requirements of SGBs is necessary.
How would communities know how to participate in SGBs?	Studies confirm that in the formerly Black school communities, knowledge of the functioning of SGBs and the rights of communities through their participation in SGBs, is poor (Smit & Oosthuizen, 2011), (Mncube, 2008), (Van Wyk, 2004), (Lewis & Motala, 2004).
How would communities form opinions about SGB matters?	SASA and numerous studies confirm the notion that democratic practice empowers communities. Participative democracy is limited by the extent to which critical discourse may be conducted freely through the public sphere (Hacker & Van Dijk, 2000). This question is therefore pertinent to the attainment of democratic freedom.
What means would individual community	Many socio-economic factors inhibit community

members have for focused participation in school relevant activities?	participation in their schools. Therefore, means to facilitate participation is sought (Van Wyk, 2007).
What would enable community members to improve their participation in SGBs?	Weak, misguided and misinformed participation in SGBs characterises many communities (Mncube, 2009), (Mncube, 2008), (Van Wyk, 2004), (Lewis & Motala, 2004). The question therefore arises in order to improve community participation.

The researcher's responses to these questions are detailed in Table 3 below;

RESPONSES	SUPPORTING RATIONALE
1) Establish focused channels for disseminating information for educating and informing the community about the purposes of SGBs.	This practice would create awareness of the need for SGBs. The Universal Declaration on Democracy (1997) prescribes that processes be followed to broaden the base of public participation. Inclusivity (non-exclusion of members on the basis of gender, race, class, etc.) for members of a community is a fundamental requirement of a participative, democratic system of school governance. Awareness is a precursor to inclusiveness.
2) Create information repositories for information about roles and activities of SGB members.	This practice will inform community members how they should participate. Democratic participation enables communities to generate social capital benefits (Pasek, More & Romer, 2008). Democracy, as a mode of associated living and conjoint communicated experiences (Dewey, 1916) implies collaborative activities. Collaboration in turn requires an awareness as "an understanding of the activities of others, which provides a context for your own activities" (Dourish and Belotti, 1992).

<p>3) Utilise accessible media channels to promote community discourse and mobilise communities to embrace and implement school governance.</p>	<p>This practice will foster the adoption of democratic principles in school governance. Discourse and deliberation are some of the benefits to be gained from participative democracy (Pasek, More &amp; Romer, 2008). These benefits would in turn serve as motivation for community participation.</p>
<p>4) Provide channels and structures for collaborative activities between role-players in communities and school structures.</p>	<p>This practice will promote community efforts in achieving both specific objectives such as the adoption of and adherence to an SGB constitution, and general objectives such as effective and focused participation in activities of particular school structures, such as grades. Preference measurement, referenda and elections are further benefits of participative democracy (Pasek, More &amp; Romer, 2008).</p>
<p>5) Provide information resources for training of parents and learners in SGB participation.</p>	<p>This practice will promote effective rather than nominal membership participation. “The case for participatory democracy is based on the claim that the construction, articulation and promotion of the common good cannot be delegated, but must evolve from the communicative interactions of active citizens (Barber, 1984; Fishkin, 1991; Pateman, 1970).” (Haus &amp; Sweeting, 2006).</p>

These 5 “School Governance Practices” serve as a foundation set of practices to initiate and maintain community participation in governance of their schools thus establishing potentially effective SGBs. In the table presented in Table 10, “Analysis of the Factors Inhibiting SGBs from achieving Transformation”, each of the transformational objectives identified in this study are interrogated through the following questions;

- a) What factors inhibit the attainment of the objective?
- b) What specific actions enabled by effective SGBs would overcome the inhibiting factors

Once again a process of dialectic reasoning is the method deployed by the researcher to provide logically sound responses to the questions. An extraction from the analysis presented in Table 10

of the “School Governance Practices” and the related “Actions” that would give effect to them, is presented in Table 11. These practices and actions represent the practical means to achieving the teleological outcomes of the democratic participation of school communities in SGBs.

## **2.8 Conclusion**

### **2.8.1 Review of Findings**

A review of literature regarding the state of education in South Africa raises the question; “What are the underlying causes for the persisting failure of South African school education?”

A critical analysis based on the social theory of Foucault known as “*history of the present*”, is performed through a review and assessment of the history of schooling education in South Africa. It identifies a persisting legacy of 11 problems requiring redress in order to achieve effective social transformation in education. These transformational objectives are;

- Universal school attendance for all children
- Improved teacher training
- Solutions to disaffected and under-qualified Black teachers
- De-racialisation and consolidation of Administrative structures
- Improved learner performance in formerly Black schools
- Reduction of drop out rate in formerly Black schools
- Reduced class sizes
- Increased funding of formerly Black schools
- Depoliticised and balanced history curriculum
- Adoption of a teaching culture promoting problem-solving, free enquiry and active learning
- Removal of destructive influences on schools of the effects of the power struggle

Following the finding of these transformational objectives for school education in South Africa, the underlying causes for the persistent failure to address them effectively during the 18 years of democratic government, are revealed and analysed through a critical evaluation of the exercising of power by the state, through assessment of relative “*discursive formations*”. The analysis of state powers exercised through legislation and policies inspired by two contending philosophical positions, namely democracy and communism, is undertaken in order to assess their influences on the prevailing state of school education in South Africa. The process establishes the “*regimes of truth*” about the education system. The assessment is made of various policies and legislation

spawned under the influences of the two contending philosophies, to either promote or obstruct the attainment of the identified transformational objectives. This analysis reveals a scenario indicating a structural problem stemming from the ideological mix within the Tripartite Alliance, that causes the following legislative contradiction; Whereas the state has legislated for the empowerment of communities to effect change through democratic participation in schools in the SASA, it conversely impedes change through communist inspired legislation in the form of the National Qualifications Framework and the Labour Relations Act. Political influences have strongly driven the formulation of policies that have resulted in the devising, adoption and continued retention of a discredited and failing OBE-based curriculum. This curriculum direction is burdened further by educator employment policies that enable recruitment of inadequately qualified teachers. These employment policies are in turn, propped up by militant labour unionism, aligned to the cadre-deployment objectives of the communist inspired National Democratic Revolution. As the state opposes itself within the structures of the ideologically misaligned ANC Tripartite Alliance, it is paralysed into inaction by its own internal contradictions.

The realisation that the solution to the problems of the education system are unlikely to come from the state, motivates the quest for a solution originating in society. The 2<sup>nd</sup> question arising from the reviewed literature is; “How may democratic participation of communities in support of their schools, lead to transformation?”

The means to social emancipation through achieving the transformational objectives by the democratic participation of communities, is proposed in accordance with the SASA legislation. A system of practices is recommended to empower communities to overcome their hurdles of socio-economic circumstances and to circumvent the obstruction of contradictory legislation in order to achieve the transformational objectives. An analysis of the practices of school community participation in the governance and functioning of their schools, was performed from ontological, deontological, ascetic and teleological perspectives in accordance with the Foucault's *“regimes of practice”*.

The ontological basis for the notion that democratic community participation in the form of SGBs may effect transformation by overcoming inhibiting obstacles was determined through interrogating both local and international studies which substantiate the proven effectiveness of

SGBs.

The extent to which deontologically inspired practices of SGBs are confounded by ideologically conflicted legislation was assessed by analysing how the practice of SGBs, enabled through legislation in SASA, are inhibited by various Communist aligned policies and strategies, from reaching the attainment of transformational objectives.

An assessment of the capacity for communities to adopt appropriately ascetic attitudes toward their application of SGB practices was performed. This assessment reveals that whilst supporting research indicates that effective, democratically functioning SGBs could provide the means to transformation, the socio-economic and socio-political circumstances of the majority of school communities in South Africa impact negatively on the capacity for communities to adopt these practices with discipline, restraint and an ascetic commitment of self-sacrifice and self-denial.

Finally, an assessment of the teleological perspective of SGB practice was performed by analysing the various legislative, socio-economic and socio-political obstacles that inhibit the attainment of transformational objectives and extrapolating the following specific “School Governance Practices” which may be adopted to overcome those obstacles;

- Establishment and running of SGBs
- Training of SGB members in order to foster participation
- Informing SGBs of their legislated rights to govern in order to prevent abuse and manipulation of SGBs
- Control through monitoring of functions and events and disseminating resulting information
- Communication and collaboration between school structures and communities

### **2.8.2 Conclusions**

The underlying causes of the failure to solve education problems are systemic and arise from contending legislation resulting from the ideological contradictions within the ANC Tripartite Alliance. As the ideological differences that led to the formulation of conflicting policies exist entirely within the ruling ANC Tripartite Alliance; changes to policies to solve the problems have

not been forthcoming and are unlikely to be made in the currently constituted ruling alliance. This internal stalemate causes the persisting nature of the problems in South African school education.

Whilst the insight provided by critical analysis substantiates the basis for the notion that democratic community participation in school governance could be the means to transformation of the failing education system in South Africa, the socio-political factors created by contending ideologies and the socio-economic factors resulting from the Apartheid legacy, tend to inhibit the effective functioning of SGBs. The adoption of specific practices may well result in effective school governance but the obstacles to creating socially cohesive communities remain formidable. The ability for communities to organise and function collaboratively are crucial for successful SGBs. Therefore, the means of enabling communities to function as organised, collaborative networks with common purposes, possibly holds the key.

Consequently, further studies should be conducted on whether and how communities may overcome the factors that inhibit their effective functioning as democratic SGBs and to what extent they may be aided by technology.



## **PHASE 2**

Evaluating Established Social Media for School Communities  
in South Africa

### **3.1 Introduction**

This phase evaluates established social media artefacts in order to determine the extent to which a solution for community participation in school governance may lie in the adaptation of the deployment of any one of a selection of existing social networking services. The study views schooling and school governance as one example of a range of social service-based activities in which communities may participate. Hence, this study evaluates fundamental criteria of selected services rather than criteria specifically related to schools. This study is therefore equally applicable to communities that may be formed around any social service topic, including schooling. This chapter represents the design stage of the third step of the Design Science Research Model (DSRM) which is described as “Design & Development”. Design may be either an instantiation of an existing artefact or an innovation of a new artefact (Peppers et al., 2008). In order to determine whether an opportunity for the former is likely, the artefacts will be evaluated “as is”. The category of artefacts evaluated, with only one exception, are social network sites (SNSs). The context imposed by the overarching research dictates that the study be conducted from the perspective of an evaluator assessing the potential usefulness of existing, established artefacts on behalf of a networked school community participating in school governance. Internet searches indicate that social media-enabled school governing networks are yet to be formed. The distinction is made between communities affiliated to schools through an SNS and communities involved in school governance. Many schools have membership of SNSs through which communities may show their affiliation and support (Google search key: “school facebook South Africa” yields 50,000,000 results) but no working instance was found of an SNS being deployed for school governance. The absence of networked school governance communities could imply limitations to the robustness of this research inasmuch as the opportunity to engage with a network of users, in the envisaged community context, does not exist. However, by adopting a context-based technology evaluation model (Lewis & Wrage, 2005), in a qualitative study, a representative sample of popular social media artefacts are assessed from the contextual perspective of school communities in South Africa, to arrive at a credible outcome in response to the question;

To what extent are the established social media artefacts able to provide functions suitable for supporting community activities in support of school governance?

This study is a preliminary evaluation that focuses on criteria arising from the general school or other social service community context rather than specific functional needs to meet the democratic participation of communities in their schools. The rationale behind this phase of the research is the determination of whether an existing social media service provides the basic, enabling functionality upon which a complete solution could be configured and thereby achieve a research result that offers a quicker and more cost effective route to addressing the schooling problems in South Africa.

The study proceeds after this introduction, as follows; A literature review of academic papers establishes a contextual understanding of social media for this study. The theoretical basis of a research framework follows. This in turn leads to the development of a research framework. Discarding a variety of possible approaches to the research due to the absence of a user base to serve as subjects, the selection of a context-based evaluation model is justified. The research methodology proposed by the model is interrogated to determine its appropriateness for the research question and is followed by the determination of an evaluation strategy based on the selection matrix developed by Cronholm & Goldkuhl (2003). An explanation of the selection of specific social media artefacts for evaluation follows. Then there follows chapters on data sources and data analysis. The remainder of this paper details the execution of the three component parts of a research paradigm. The ontological and epistemological perspectives are discussed in the chapter dedicated to the establishment of a list of evaluation criteria and the allocation of weightings to the criteria to reflect the relevance of each criterion to the reality of the school communities. This is followed, within the chapter on evaluation, by a description of the execution of the research methodology and its outcomes in the form of a table of results. Finally, the paper interrogates the results of the analysis and draws conclusions in response to the research question and concludes that an appropriate solution is not to be found in any of the established systems evaluated and the solution would therefore require an innovation rather than an instantiation of a social media artefact.

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*Note 1: In this chapter, 2 conventions in the meaning of words should be noted; “user” or “users” refer to people or other entities who are members of, or subscribers to, SNSs and other social media. “Friend” or “Friends” (with a capital “F”) refers to members of a user's network community within an SNS.*

*Note 2: In this chapter, the names of Internet based services or businesses are italicised.*

*Note 3: The terms SNSs, Social Network Sites and Social Networks are used interchangeably dependent upon which author's work is being referred to in the text.*

### **3.2 Literature Review**

The significance of social media as a phenomenon is articulated by Kaplan & Haenlin (2010), who note that “The evolution of social media retransforms the World Wide Web to what it was initially created for: a platform to facilitate information exchange between users”. Whilst the broader topic of social media provides a view of the entire spectrum of artefacts through which computer-mediated social interactions take place, the two-way inter-personal communications facilitated by SNSs that facilitate the formation and growth of virtual communities, are the focus for this study. Further establishing the context of social media, various relevant aspects are addressed to deepen the understanding of the subject. In the following subsections the technological context of social media in general, the context of SNSs within the social media paradigm and the functional context of SNSs, are addressed to provide a broad view of the phenomenon. Then, narrowing the focus, the capacity for social media to develop networked communities in the promotion of a social service or social need, such as school governance, is investigated.

#### **3.2.1 Technological Context of Social Media**

Advances in ICT that are collectively referred to as Web 2.0, have enabled the development of pervasive, computer-mediated social interactions. The vast communications infrastructure to facilitate the efficient functioning of the internet coupled with massively scalable server platforms plus cost effective and efficient mass data storage devices have laid the infrastructural foundation for the establishment of the operating platforms and software development capacities upon which Web 2.0 and User Generated Content could be deployed (Anderson, 2007).

“Web 2.0” is a term coined in 2004 by Dale Doherty to describe a new way in which software developers and end-users started to utilize the World Wide Web (Anderson , 2007); that is, as a platform whereby content and applications are no longer created and published by individuals, but instead are continuously modified by all users in a participative and collaborative fashion (O'Reilly, 2005). Although Web 2.0 does not refer to any specific technical update of the World Wide Web, there is a set of basic functionalities that are necessary for its functioning. Among them are Adobe Flash (a popular method for adding animation, interactivity, and audio/video streams to web pages), RSS (Really Simple Syndication, a family of web feed formats used to

publish frequently updated content, such as blog entries or news headlines, in a standardized format), and AJAX (Asynchronous Java Script), a technique to retrieve data from web servers asynchronously, allowing the update of web content without interfering with the display and behaviour of the whole page (Kaplan & Haenlein, 2010). AJAX is itself not a single technology but a term for a collection of technologies coined by *Google* incorporating;

standards-based presentation using XHTML and CSS;

dynamic display and interaction using the Document Object Model;

data interchange and manipulation using XML and XSLT;

asynchronous data retrieval using XMLHttpRequest;

and JavaScript binding everything together. (O'Reilly, 2005).

The development and growth of the phenomenon of social media has occurred because of the capabilities enabled by Web 2.0. SNS's are a particularly fast moving target to research as the services are constantly evolving with new functions being introduced on a seemingly continuous basis and with growth rates that tend to defy accurate measurement.

### **3.2.2 Defining Social Media and Social Networks**

Social Media is a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0 that allow the creation and exchange of User Generated Content (Kaplan & Haenlein, 2010). Included in the broader category of social media are professional and social networking sites that facilitate meeting people, finding like minds and sharing content (Anderson, 2007).

Many sources and researchers provide definitions for social networks in the absence of a universally accepted descriptive phrase. For example;

The *Online Oxford Dictionary* defines social networks as;

“noun – 1. a network of social interactions and personal relationships. 2. A dedicated website or other application which enables users to communicate with each other by posting information, comments, messages, images, etc.”

boyd & Ellison (2008) offer;

“A web-based services that allow individuals to; (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. The nature and nomenclature of these connections may vary from site to site.”

Whilst *Wikipedia* offers a definition of social networks as;

“an online service, platform or site that focuses on building and reflecting of social networks or social relations among people, who, for example, share interests and/or activities”

A search for a definition in *Google* produced 25 different sources for defining social networks and only 2 of them were not of the on-line variety. None of them contradict the definition offered by *Wikipedia*.

### **3.2.3 Social Networks in the context of Social Media**

The Web 2.0 technologies have facilitated the development of many varied applications and services to exchange content between users. Inevitably, themes or categories of artefacts evolved. boyd & Ellison (2008) divide social media into the following categories;

- **Social networks**

these sites allow people to build personal web pages and then connect with Friends to share content and communication. The biggest social networks were *Facebook*, *Twitter*, *LinkedIn* and *MySpace* (Source: *eBizMBA Rank* which claims to use a constantly updated average of each sites *Alexa* Global Traffic Rank and the U. S. Traffic Rank from both *Compete* and *Quancast*) although *Twitter* is not, strictly speaking, a social network.

- **Blogs**

perhaps the best known form of social media, blogs are online journals (web logs), with entries appearing with the most recent first. It has been defined by its form as, “frequently updated, reverse-chronological entries on a single Web page.” (Blood, 2004) *EbizMBA Rank* rates *The HuffingtonPost*, *TMZ* and *BusinessInsider* as the most popular.

- **Wikis**

these websites allow people to add content to or edit the information on them, acting as a communal document or database. The best-known wiki is *Wikipedia*, the online encyclopaedia which has over 3.7 million English language articles. Ranked behind them are *Yahoo!Answers* and *About*. Ward Cunningham, who developed the first wiki and gave it the name wiki, described it as “the simplest online database that could possibly work” (Wang & Turner, 2004)

- **Podcasts**

A podcast is a digital audio or video file that is episodic, downloadable, program-driven, mainly with a host and/or theme and convenient. They are usually disseminated via an automated feed via computer software (Gil de Zúñiga et al, 2010). The RSS (Originally stood for “RDF Site Summary” but has changed to represent “Really Simple Syndication”) icon is usually used to indicate the web feed for a podcast.

- **Forums**

These are areas for online discussion, often around specific topics and interests. Forums came about before the term “social media” and are a powerful and popular element of online communities. They are identified by their topics or subjects and may be deployed through a myriad of products or purpose written applications. “Many are linked to mega-communities, websites that host literally thousands of online communities. Amongst many others, large mega-communities like *Geocities* and *OneList.com* which had over 900,000 groups and 18 million members became part of *Yahoo! Groups*.” (Dahlberg, 2001) As at October 2011, *Yahoo! Groups* lists in excess of 10,400,000 groups on their site. (<http://dir.groups.yahoo.com/dir/1?st=10> )

- **Content communities or UGC**

These are communities which organise and share particular kinds of content. The most popular content communities tend to form around photos (*Flickr*), bookmarked links (*del.icio.us*) and videos (*YouTube*). However, another development in UGC has arisen where citizens become pseudo journalists by sending articles and other content to mainstream media. “Online, self published current affairs journalism and news publications



built on a preponderance of reader contributions are starting to offer alternatives to established news providers. At the same time mainstream sites have begun to host spaces for user generated content” (Thurman, 2008).

- **Microblogging**

This is social networking combined with bite-sized blogging, where small amounts of content (‘updates’) are distributed online and through the mobile phone network. *Twitter* is the clear leader in this field. “Microblogs, a relatively new phenomenon, provide a new communication channel for people to broadcast information that they likely would not share otherwise using existing channels (e.g., email, phone, IM, or weblogs).

Microblogging has become popular quite quickly, raising its potential for serving as a new informal communication medium at work, providing a variety of impacts on collaborative work (e.g., enhancing information sharing, building common ground, and sustaining a feeling of connectedness among colleagues)” (Zhao & Rosson, 2009).

### **3.2.4 Functional Context of Social Networks**

The functional aspects of social networks concern socialisation. It is the socialisation process that differentiates a Web 2.0 social networking community, and some earlier virtual communities from traditional Web 1.0 Internet groups. The process of socialisation involves activity where people are shaped by the norm, culture and value of their identified group (Lai & Turban, 2008). The establishment of personal networks of Friends is the primary activity of social network formation (boyd & Ellison, 2008). Many social network sites cater to users with like minds and thus potentially form friendships. Having Friends is a critical signal of conveying the expected social boundaries. Alternatively, people invite their existing friends to join their groups (Lai & Turban, 2008).

Although Anderson (2007) states that social networks are characterised by democratic participation in which they leverage user-self service to reach out to the entire Web to span every area of the network, there are many instances where communications between users are subjected to censorship or mediation to defend social sensitivities and standards in the discourse (Kirkpatrick, 2010), (boyd & Ellison, 2008).

They are also able, subject to ideal conditions (Anderson, 2007), to harness the collective

intelligence through efficient online dissemination of communications. Therefore the effectiveness of the community is dependent upon the degree of user contributions to create critical mass (Surowiecki, 2004). The extent to which the collective effort of thought, opinion and emotion can produce a “right answer” as suggested in Surowiecki's “Wisdom of the Crowd” is debatable (Anderson, 2007) but what is definite is that the ease of conducting the discourse is enhanced.

They can effect “viral promotion” through word-of-mouth. This occurs when users advertise a site, a service, activity, event, or a product by sharing with others their positive experiences (Phelps et al. 2005).

In contrast to more traditional forms of interpersonal electronic communication such as conversing by telephone, email and text messaging, the mode of discourse dissemination is “pull” not “push” in which the systems let people bring to themselves the relationships and content that they want, instead of having an external entity force it upon them. Hence the recipients and not the originators (pushers) of communications are in control of the conversations. In summary, social networks may be characterised by their enablement of cooperation and collaboration but not control. They are comprised of networks of cooperative data services. Therefore, there is ideally, no control imposed on data use at the other ends of the connection (Lai & Turban, 2008).

### **3.2.5 Research Question**

Contained within the overarching research objective, this phase evaluates the capacity for a specific selection of social media artefacts to serve as enabling tools for effective school governance to improve schooling in South Africa . The vast majority of schooling in South Africa takes place as a public service through the public schooling system and school governance, as established in the previous phase, is ideally a function of the broader school community. In the absence of prior research dealing with social media in the realm of school governance specifically, the focus of the research is directed at the more generalised topic of the capacity for social media to enable a public service discourse in the schooling context.

The potential for social media to foster democracy through the generation of social capital, which in this context is understood to mean productive benefits produced by social relationships,

is generally affirmed (Hacker & Van Dijk, 2000), (Tiwani & Bush, 2001), (Tambini, 1999), (Curran et al, 2009), (Rheingold, 2008), (Burgess et al, 2006). The question is therefore raised as to the reasons for the apparently low impact of social media in public service generally. The following studies indicate that a lack of know-how and trust as well as a failure to fully assimilate to the medium of the Internet are the major reasons for this low impact;

The lack of education of both the youth (Rheingold, 2008) and general public (Burgess et al, 2006) in the use of social media inhibits effective participation and obstructs the utilisation of social media for public service discourse. Questions about the threats to the integrity of social media in their potential roles as channels for public service discourse, are addressed by the studies of Meraz (2009) and Goode (2009). Whilst they provide an insight into the capacity for social media to circumvent both the gate keeping and agenda setting activities exercised on more traditional media by business corporations on the one hand and governmental institutions on the other, they nevertheless speculate on the danger for social media to be similarly encumbered through loss of ownership to media and ICT conglomerates.

A further obstacle to social media playing the public service role is attributed to the difficulties faced by organisations with public mandates to adapt themselves to embrace the social media environment. This is primarily as a result of practices created by paradigms associated with more traditional methods of information and communication which are generally restrictive and prescriptive (Kanter & Fine, 2010). In addition, public service organisations themselves seem to struggle with the concept of social media. A study, by way of example, of European government bureaucracy, illustrates the limited perspective that public service bureaucracies have of social media when viewed purely as an alternative channel for public service broadcasts (Nissen (2006).

In view of the challenges faced by stakeholders across the participant spectrum in the context of social media in the public service, it is not surprising that whilst many of the studies reviewed for this research confirmed the potential for social media to deliver on public service and participative democracy, no example of a study on either the planned or actual usage of social media in support of either school communities or any other social service, could be found. This study therefore seeks to cast some light on the persisting issue of the role of social media in public service by posing and answering the following question:

“To what extent are social media able to provide functions suitable for supporting community activities in support of school governance?”

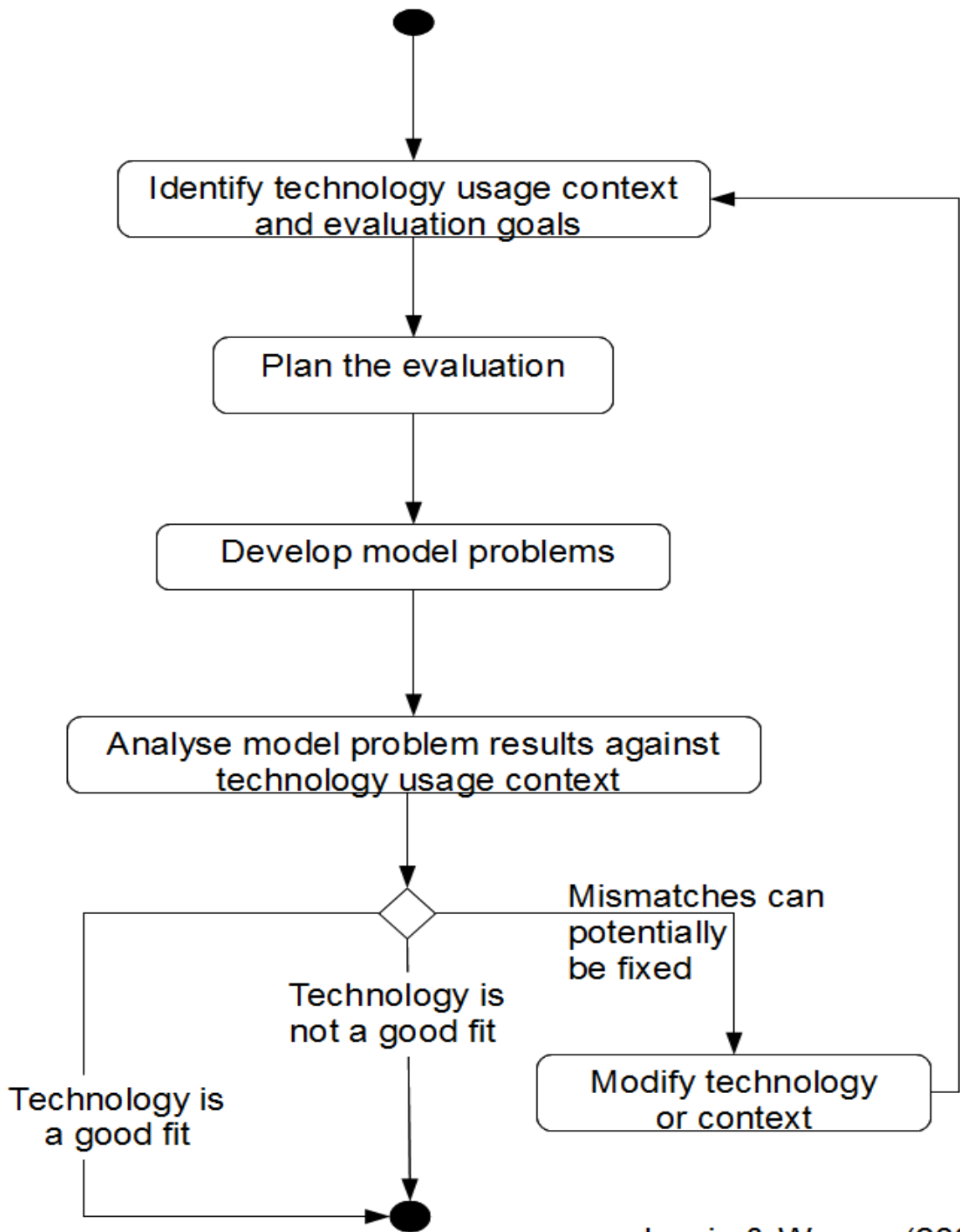
### **3.3 Research Framework Development**

In view of the previous phase in the overall study providing an understanding of schooling and school communities in South Africa, an opportunity to adopt either an action research or case study research approach in this phase, would be appealing. However, the idiographic approach required by both case study and action research through collaborative interactions with the research subjects (Baskerville, 1999) is not possible as this research precedes the establishment of school governing communities as a network of members with a common purpose collaborating through a social media service. According to social discourse on this topic, (mashable.com, facebook.com) whilst schools do register with social media service providers as adjuncts to their web pages; privacy issues, sensitivity of exposing data about youthful learners and the risks of inappropriate or unwanted comments tend to make school administrations err on the side of caution. As a result, an example of a social media page being utilised for school governance issues, rather than a general information site about the school, could not be found.

The problem of synchronisation is prevalent in IS research because the information systems arena is characterized by constant technological change and innovation. IS researchers therefore often find themselves trailing behind practitioners in proposing changes or in evaluating methods for developing new systems. Researchers usually learn by studying the innovations put in place by practitioners, rather than by providing the initial wisdom for these novel ideas (Benbasat et al, 1987). In this instance, the inability to effect an idiographic approach to the study arises because the research precedes the deployment of systems (social media) for the specific objectives (school governance by school communities) demanded by the objective of the research. Efforts to find relevant examples of evaluative research into the application of social media for public service objectives in general, were also fruitless. There are examples of social media evaluation performed through user survey tools but these do not meet the requirements of this research as they focus upon various, generalised technology acceptance criteria rather than evaluation of functional fitness for a specific purpose. Reviewing prior studies revealed that most IS technology evaluation research appears to have been conducted into the deployment of IS artefacts in the organisational context. Communities formed through social media are not

established organisations and exist purely as a factor of their diffusion and are therefore not formally constituted except insofar as users confirm their acceptance of the terms of usage. In addition, evaluative studies tend to focus on purpose built IT artefacts designed to meet user requirements rather than the generalised services to which users are expected to adapt and assimilate, that characterise social media. Therefore, the decision is taken to follow a context-based evaluation framework devised by Lewis & Wrage (2005) as it is deemed appropriate to the circumstances and the subject of this research phase.

## Context-based Technology Evaluation Model



Lewis & Wrage, (2005)

Figure 3

Following the context-based evaluation model, this research phase is executed through the following activities;

- Establish a set of criteria justified by their relevance to the fundamental requirements of school governing bodies in South Africa, against which the chosen artefacts may be evaluated.
- Apply a weighting to the criteria in order to increase their relevance to the context of the community's circumstances.
- Perform an evaluation by empirically testing the extent to which the selected artefacts measure up against the evaluation criteria and rank them relative to one another.
- Apply the weightings to the results of the evaluation to provide a rated assessment of the extent to which the social media artefacts may be suitable for serving the needs of school communities in South Africa.
- Inductively analyse the results of the evaluation to draw conclusions and make a determination in response to the research question.

### **3.3.1 Research Methodology**

In a subjective, interpretivist analysis of the context and data, the epistemological perspective prompts the researcher to construct questions, in the form of evaluation criteria. Subjectively reasoned, numeric weightings are applied to each of the criteria to reflect the relative importance of each criterion within the whole set of criteria.

As this evaluation is focused upon the phenomena of social media artefacts as they could be utilised in the context of school communities, the researcher pursues the phenomenological approach to the methodology wherein the study of structures of consciousness as experienced from the first-person point of view (Stanford School of Philosophy), is adopted. The aim of the researcher is to describe as accurately as possible the phenomenon, refraining from any pre-given framework, but remaining true to the facts (Giorgi, 1997). The phenomena, social media artefacts, are empirically tested against the criteria and allotted numerical ratings for each result to arrive at a score per criterion per artefact. Weightings would be applied to the scores in order

to calculate a set of results.

As the evaluation is repeated across a selected set of artefacts, a hermeneutic cycle is established. The philosophical base of interpretive research is hermeneutics and phenomenology (Boland, 1985), (Myers, 1997). Interpretive methods of research in IS are "aimed at producing an understanding of the context of the information system, and the process whereby the information system influences and is influenced by the context (Walsham, 1993)" (Myers, 1997). The mixing of positivist and interpretivist approaches in the research method are adopted because it is the best and most reliable method to produce the desired outcomes in the circumstances of the research where the observer and participant are one and the same. This pragmatic approach justifies the mixing of paradigms (Johnson & Onwuegbuzie, 2004). The research paradigm of this phase of research is therefore mixed-method.

Interrogating the rationale for the research provides direction for the research design (Travis, 1999). Evaluation of information systems typically seek to answer the questions; Why? (objective of evaluation), Who? (which stakeholders' perspective is going to be evaluated), When? (which phase in the system development life cycle), What? (aspects or focus of evaluation) and How? (methods of evaluation), (Yusof et al, 2008). In this particular study, the response to the question "Who?" is restricted to the researcher who is influenced by a subjective reality (Travis, 1999) of school communities. The response to the question "When?" is post the development life cycle as all the artefacts being evaluated are "live".

The responses to the remaining three questions, Why, What and How, should determine the research question (Travis, 1999). The research question posed is, "To what extent are social media able to provide functions suitable for supporting community activities in support of school governance?" The reason for the research is stated in the research question as; "supporting community activities in support of school governance" in response to the question "Why?" The subjects of the research provide the answer to the question "What?" In the research question, the subjects are; "social media" and their "functions". In response to the question "How?", the research question implies an evaluation process in the words; "To what extent", "suitable for" and "able to provide".

The responses to "What and How?" determines the objective of the research (Travis, 1999). From the research question the following research objective is derived; "To what extent are



social media able to provide functions suitable?”

This interrogation of the rationale for the research by deconstruction and analysis of the research question, validates the decision to pursue a context-based technology evaluation.

### 3.3.1.1 Research Strategy

Three interconnected, generic activities that define qualitative research are a framework (theory or ontology), that reflects the researcher's perception and ideas of reality, that specifies a set of questions (epistemology) that the researcher examines in various ways (methodology, analysis). The net that contains the researcher's ontological, epistemological and methodological premises, may be considered a paradigm (Denzin & Lincoln, 2005). Inasmuch as a paradigm is “a basic set of beliefs that guide action (Guba, 1990)” all research is interpretive. Qualitative researchers, pursue interpretive activities through the use of semiotics, narrative, content, discourse, archival and phenomic analysis, even statistics, tables, graphs and numbers (Denzin & Lincoln, 2005). They also draw on and utilize the approaches, methods, and techniques of ethnomethodology, phenomenology, hermeneutics, feminism, rhizomatics, deconstructionism, ethnography, interviewing, psychoanalysis, cultural studies, survey research and participant observation, amongst others (Denzin & Lincoln, 2005).

The objectives of the evaluation determine the methodological approach (Kaplan & Maxwell, 2005). The objective, as stated in the research question, is therefore focused upon the phenomena of social media and their functioning relative to school communities and school governance.

In order to determine an appropriate evaluation strategy, the evaluation strategy matrix devised by Cronholm & Goldkuhl (2003) is applied. This matrix comprises of 3 “how strategies” across 2 “what strategies”, providing for a choice out of 6 possible strategies determined by the approach being adopted to the evaluation and what is being evaluated. The three types of “how strategies” are distinguished as;

Goal-based evaluation

Goal-free evaluation

Criteria-based evaluation

The differentiation is made in relation to what drives the evaluation. Goal-based evaluation

means that explicit goals from the organisational context drive the evaluation and these goals are used to measure the IT system. The goal-free evaluation means that no such explicit goals are used. Therefore goal-free evaluation is an inductive and context-driven strategy. Criteria-based evaluation means that some explicit general criteria are used as an evaluation yardstick.

Two types of “what strategies” are distinguished as;

IT-system as such

IT-system in use

“IT-systems as such” means to evaluate the IT-system without any involvement from users and there are only the evaluator and the IT-system involved. The data sources that could be used for this strategy is the IT-system itself and possible documentation of the IT-system. “IT-systems in use” means to study a use situation where a user interacts with an IT-system. This analysis situation is more complex than the situation with “IT-systems as such” since it also includes a user. The data sources for this situation could be interviews of the users and their perceptions and understanding of the IT-system’s quality, observations of users interacting with IT systems, the IT-system itself and the possible documentation of the IT-system (Cronholm & Goldkuhl, 2003).

Applying the strategy evaluation matrix to the topic and approach of this phase of research yielded the following result;

“How strategy”

Goal-based evaluation is rejected as inappropriate because it requires a study to address the goals established by an organisational perspective. The user community comprising school communities across South Africa is only an entity in concept until such time as it is actually formed and is therefore in no position to have stated goals.

Criteria-based evaluation is rejected because no criteria are stated or implied in the research question.

Goal-free evaluation is the accepted strategy both by default due to elimination of the alternatives and on the basis of the purpose of the goal-free evaluation being to gain a deeper understanding of the nature of what is to be evaluated and to generate motivation and commitment. Goal-free evaluation is defined as gathering data on a broad array of actual effects

and evaluating the importance of these effects in meeting demonstrated needs (Cronholm & Goldkuhl, 2003). The demonstrated needs are defined as a set of criteria established within the process of evaluation. This accurately describes the motivation and method required to meet the objective of this phase of research into social media.

“What strategy”

The utilisation of social media artefacts to enable the public service need of school governance, or any similar public service need, has not yet been implemented. Therefore an “IT-system in use” evaluation strategy could not be performed which implies that this evaluation is performed on an “IT-system as such” (Cronholm & Goldkuhl, 2003).

As a result, this phase of research adopts a goal-free evaluation of a IT-systems as such. An evaluation strategy of an “IT-systems as such” as the objects of study in a goal-free evaluation implies that the evaluation perspective is an exploratory walk through the IT-systems where the researcher describes their functionality. This is done by studying each of the IT-systems themselves, their documentation and where possible, by interviews with the system owners. The explorations should be evaluated in terms of strengths and problems. Goal-free evaluation is defined as gathering data on a broad array of actual effects and evaluating the importance of these effects in meeting demonstrated needs (Cronholm & Goldkuhl, 2003). This type of evaluation research involves qualitative research methods to understand the perception of an information system by its users, the context within which the system is implemented or developed, and the processes by which changes occur or evaluation outcomes are generated (Kaplan & Maxwell, 2005). Qualitative research is applicable across many disciplines and does not have a distinct set of methods or practices that are entirely its own (Denzin & Lincoln, 2005). In goal-free evaluation, the evaluator performs an introductory open minded and problem finding evaluation that provides a recommendation of a continued evaluation of some other type (Cronholm & Goldkuhl, 2003).

### 3.3.1.2 Selecting Artefacts for Evaluation

Having established that the subjects of the research are social media and their functions, the scope of the research requires narrowing in order to contain it within manageable proportions. This is accomplished by selecting specific social media artefacts for evaluation, based upon two

factors; firstly perceptions of the popularity of social media in the local, South African context and secondly; the diversity of the selected artefacts. Popularity is viewed as being synonymous with user acceptance in this instance. The reasoning behind this assumption is premised on the facts that the services being assessed are freely accessible, within the bounds of each individual's circumstances, to all technologically enabled users and the freedom to change from one service to another is unhindered. This assumption of freedom to choose is not premised upon either an incompatibilistic view (where the individual has the total free will to do otherwise) or a deterministic view (where the freedom to choose is curtailed by everything that happened in the past) of freedom (Van Inwagen, 1983). Neither is any consideration or presumption made about the extent to which a multitude of external social, economic and technology factors may play a role in the process of choosing (Davis et al, 1989). It is rather an untested presumption of individual freedom in South Africa, underpinned by the ontological perspective of the researcher, for the specific purposes of narrowing the focus of this research. A qualitative assessment is made of the correlation, arrived at by inductive reasoning, that exists between user acceptance and popularity. The premise for this assessment is the belief that popularity amongst users who enjoy freedom to choose as a legal right and participate without any form of coercion, provide credible indications of user acceptance. A quantitative assessment is not attempted because quantitative data pertaining to either Internet or social media usage in South Africa produces unreliable results, as demonstrated by the following contradictions;

- According to Internet World Statistics (March, 2011), South Africa had 6,8 million people with access to the internet (13.9% of population) but 70% of the population own a mobile phone. The Digital Media and Marketing Association report that 50% of internet users use ADSL while 20% use a mobile internet service. At only 1.36 million people accessing the Internet through a mobile internet service out of 35 million mobile phone users, the proportion of mobile internet users is very low in South Africa.
- Contrast these figures with research data compiled by Kreutzer (2009), who surveyed mobile phone usage amongst grade 11 pupils from schools in impoverished areas around Cape Town. He found that “a majority of respondents (68%) have used a mobile phone on the previous day to access the Internet, while half of all respondents (49%) used the mobile Internet to access the Web (this survey distinguished between Internet access in

general and access to the Web via the Internet ) on the previous day. Interpersonal communication remained the most common use of phones, with 87% of respondents making calls or sending SMS messages on a typical day. A significant minority (23%) of students did not own their own personal handset, despite the near-universal use of mobile phones among all respondents (96% use one on a typical day)” (Kreutzer, 2009). Based on this data, the proportion of mobile internet users is very high but this may be a phenomenon that is applicable to that specific environment only.

- Added to the above inconsistencies in information is the reported penetration of Mxit having exceeded 27 million users, predominantly on mobile internet, with the majority of users coming from South Africa (WebAddiCT(s); , October 2010).

Whilst these details may reflect inconsistency in the methods employed by various sources to estimate usage figures, the underlying data also seems to have limitations that imply inaccuracy. For example, the practice of borrowing handsets would depress user numbers based on active phone SIM card numbers. Conversely, multiple accounts by individuals on SNSs would inflate user numbers. It appears that Internet usage through mobile handsets in South Africa is far greater than the figure suggested by the survey data used by Internet World Statistics. However, practices in the usage of mobile phones and social media make it difficult to obtain data with any certainty of the degree of accuracy.

Selection of the artefacts for evaluation are therefore not based upon quantitative statistical data but on perceptions of usage examined through a dialectic process of posing questions arising from the available facts and reaching conclusions from the answers. Based on the researcher's perception of their popularity and their diversity, one from another, *Facebook*, *LinkedIn*, *Twitter* and *Mxit* are the selected artefacts. Their selections are justified as follows;

***Facebook*** - There is nothing to suggest that it has not gained acceptance in South Africa to the same extent that it has amongst internet users in other countries. The slow role-out of the telecommunications infrastructure to deliver the internet in South Africa (Abrahams & Goldstuck, 2010), means that the popular SNSs that preceded the launch of *Facebook* probably did not make any meaningful impact. *Facebook* is a very good example of an open SNS and it accommodates the launching of external applications from the *Facebook* platform (Kirkpatrick, 2010).

As of July 2011, *Facebook*, launched in 2004, was estimated to have over 750 million active users worldwide (Goldman Sachs – investor announcement), making it the most popular SNS. According to Socialmedialogue (2011), South Africa had 4 million active users on *Facebook*. As mentioned previously, the accuracy of usage statistics are difficult to verify.

***LinkedIn***, - It seems to have succeeded in South Africa as an SNS for work-seekers and networking around topics related to the workplace amongst technical and professional people. This is evidenced by the apparently high representation of local enterprises using it. It is a good example of an affiliation-focused site that by design, limits participation.

*LinkedIn* was launched in 2003 and is predominantly a professional networking site. *LinkedIn* reports that it has over 100 million users in over 200 countries and territories. In June 2011, *LinkedIn* had 33.9 million unique visitors to its site. Usage in South Africa cannot be verified.

***Twitter*** - It is available on mobile handsets and therefore has a better chance than most of acceptance in South Africa due to the high costs of land-line Internet access. A perception of its popularity is gained by its growing support as the major media format for citizen journalism and the high visibility given to “twitter handles” in both the broadcast media and printed media. It is the best example of an SNS that offers microblogging (it is called microblogging because the size limitation on messages, known as tweets, that may be posted on the user's profile page, is 140 characters)

*Twitter* as of March 2011, had around 200 million active users worldwide (BBC News - <http://www.bbc.co.uk/news/business-12889048> ) Launched in 2006, it generates 350 million tweets and 1.6 billion search queries per day (Twitter Engineering – May, 2011).

***Mxit*** - It is already a proven success amongst the youth in South Africa and probably has a larger rate of penetration than any other SNS. The perception of its popularity is gained purely from its reported number of users and its predominance in the local South African market. It is an Instant Messaging service that can run on all mobile phones, including iPhones and Blackberrys and interacts with all of the larger IM services.

*Mxit* is a South African service that was launched in 2003. As at October, 2010, it had exceeded 27 million subscribers, making it the largest SNS in Africa and was gaining 40,000 new subscribers per day (WebAddiCT(s); - October 2010).

In addition to their perceived popularity in South Africa, the sites which have been selected represent examples of an open SNS (*Facebook*), an affiliation-based SNS (*LinkedIn*), a microblogging site (*Twitter*) and instant messaging service (*Mxit*) which are distinctly different varieties of social media artefacts and are therefore suitable to better serve the purpose of determining which different characteristics, or combinations of characteristics are most likely to succeed in meeting the requirements of school communities and other social service-based communities.

### **3.3.2 Data Sources**

The most important principle of qualitative data collection is that everything is potential data and the evaluator must work to focus the data collection process (Kaplan & Maxwell, 2005). In pursuit of this principle, data is gathered throughout every step of the execution of the evaluation.

The first step, involving the compilation of a set of criteria that provides the basis for performing an evaluative assessment of the artefacts from the perspective of school communities, is obtained from the interrogation of previous exploratory and evaluative research articles produced by reputable authors in their respective fields. Descriptions of SNSs and the functional performance aspects that characterise them, as well as research into data privacy on social media platforms and user access issues in South Africa, provide the data which are expressed as evaluative criteria.

In the second step, the evaluation criteria themselves are subjectively weighted in order to reflect their significance to the particular circumstances of school communities. Hence, each criterion would be assessed for its relevance to the researcher's understanding of the circumstances of school communities in South Africa. In qualitative research, data collection almost always involves the researcher's direct engagement in the setting studied, what often is called "fieldwork" (Kaplan & Maxwell, 2005). The process of establishing weightings for the evaluation criteria is a direct engagement by the researcher in the setting of the study. Thus, the researcher is the instrument for collecting and analysing data; the researcher's impressions, observations, thoughts, and ideas are data sources as well (Kaplan & Maxwell, 2005). The weightings and the justifications for each of them; are therefore also data.

The third step requires an objective assessment of each of the selected artefacts against the

evaluation criteria compiled in the second step. An insular form of participant observation is performed where the researcher is both the participant and the observer. Data is sourced from two sources in this step. Firstly, descriptive or instructional information supplied by the owners or providers of the artefacts in the form of user information. Secondly, in the form of the recorded results by the researcher, of empirical testing of the artefacts. The performance of each of the social media artefacts would be tested against each of the criteria in turn, in a repetitive cycle of interpretation of the data. The results would be refined by going back to see if the results still make sense in view of the additional data provided by each subsequent result, in a dialectic process. Performance scores are allocated and these too are reviewed as the analysis process proceeds and the interpretation is refined. The recorded results and observations would provide the empirical data. (The Evaluation Scores are available in Table 12)

### **3.3.3 Data Analysis**

Analysis of data resulting from a goal-free evaluation of IT-systems as such, would be inductive (Cronholm & Goldkuhl, 2003). In qualitative research, data analysis is an ongoing activity that should start as soon as the project begins and continue through the entire course of the research. The processes of data collection, data analysis, interpretation, and even research design are intertwined and depend on each other (Kaplan & Maxwell, 2005). The analysis of both qualitative and quantitative data resulting from qualitative research, is a recommended method of mixing methods (Johnson & Onwuegbuzie , 2004).

The mode of analysis is hermeneutic as the researcher seeks to make sense of the meaning conveyed by the texts gathered in the course of the research (Myers, 1997). Firstly, scores are recorded in an evaluation table wherein the weighting factors are applied to arrive at a suitability performance rating for each artefact, based upon the researchers objective assessment of their performance against the given criteria. Then the implications arising from the results of the evaluation process are expanded upon for further interpretation and conclusions are drawn.



### **3.4 Determining Criteria for Artefact Evaluation**

Fundamental criteria for evaluation, relative to the perspectives of school communities in South Africa, is the objective of this step in the evaluation process. These fundamental criteria may be equally applicable to any similar communities concerned with governance of a social service and therefore do not specifically pertain to school communities. Of the various types of social media artefacts available, the collaborative socialisation enabled by SNSs is most suitable for community formation (boyd & Ellison, 2008), (Gross & Acquisti, 2005), (Krishnamurthy & Wills, 2008), (Lai & Turben, 2008). Therefore, establishing the criteria against which the selected artefacts are evaluated includes the defining characteristics of SNSs. In addition to these, other fundamental criteria, whilst being generally applicable to any similar communities are nevertheless particularly reflective of some of the critical social circumstances of school communities in South Africa, are included. Specifically the factors of data security or privacy in social media (ITU, 2010), (Ybarra & Mitchell, 2008), (boyd & Ellison, 2008), (Gross & Acquisti, 2005), (Krishnamurthy & Wills, 2008), (Lai & Turben, 2008) and technology accessibility (Esselaar et al, 2010), (Pavon & Brown, 2010), (Abrahams & Goldstuck, 2010), are included. The criteria should therefore provide for an evaluation that addresses three equally important and fundamental factors;

- The ability to function as an SNS
- The capacity to address data privacy concerns
- The capacity to overcome technology accessibility constraints

The capacity for the artefacts to enable the specific “School Governance Practices” which resulted from the former phase of the overall study, are not evaluated at this stage as it would be premature to do so before establishing whether any of the artefacts comply sufficiently with the criteria arising from these fundamental factors.

#### **3.4.1 The Ability to Function as an SNS**

The lines of distinction between the various social media are often blurred through the integration or combination of different kinds of social media into each other. SNSs typically encompass other social media formats within their offerings but fundamentally, they serve to provide pervasive, collaborative platforms upon which relationship formation and social

discourse may be conducted. Numerous researchers, such as Gross & Acquisti (2005), Anderson (2007), Krishnamurthy & Wills (2008) and Lai & Turben (2008), have described the functions required of SNSs. However, as a concise but complete set of defining characteristics of SNSs, the list provided by boyd & Ellison (2008) is considered by the researcher to be a representative set of suitable factors for measuring an artefact's ability to function as an SNS. The following functions are typically found in SNSs and therefore may be considered to be their defining characteristics;

- Users are able to articulate and make visible their social networks.
- Profiles of users, in the form of unique pages are completed by the users themselves
- The visibility of a profile may be set or regulated/restricted according to user discretion.
- Users are prompted to identify others in the system with whom they have a relationship. Most SNSs require bi-directional confirmation for Friendship, but some do not.
- The public display of connections/relationships is a crucial component of SNSs - although there are exceptions.
- SNSs provide a mechanism for users to leave messages on their Friends' profiles.
- SNSs often have a private messaging feature similar to webmail.

(boyd & Ellison, 2008).

The applicability and relevance of each of these characteristics to communities supporting school governance in South Africa, will be considered in context and weighted according to their merits.

### **3.4.2 Data Accessibility and Privacy**

Privacy concerns on SNSs and other social media are related primarily to 2 issues. The first is the safety of younger users from potentially threatening individuals and the second is the potential for any users to suffer some form of exploitation or damage through information available in their profiles. A privacy paradox occurs when teens are unaware of the public nature of the internet (boyd & Ellison, 2008).

Within social media, it is essentially the SNSs that present a high risk of data access vulnerability due to the fact that their functional models require specific user data components. These private data are generally grouped to facilitate the setting of privacy controls. Subject to terminology variation across SNSs, these groupings are Thumbnails (brief profile containing private data with

at least a user name and photo), Greater Profiles (additional information: interests, relationships and other information that a user is willing to provide), List of Friends (the user's network) and User Generated Content (comments, photos, videos and links), (Krishnamurthy & Wills, 2008).

Controlling access to personal data depends on the relationship between privacy concerns and a person's social network. On certain occasions we want information about ourselves to be known only by a small circle of close friends, and not by strangers. In other instances, we are willing to reveal personal information to anonymous strangers, but not to those who know us better (Gross & Acquisti, 2005). The application of social network theory to the study of information revelation (and, implicitly, privacy choices) in online social networks highlights significant differences between the off-line and the online scenarios (Gross & Acquisti, 2005).

Firstly, in off-line relationships it is possible to gauge the extent to which ties are weak or strong whereas online ties can only be defined in terms of "Friend, Friend of Friend or Not". Secondly, due to the facilities to recruit Friends in an SNS, the number of weak ties can increase way beyond the capacity to accumulate weak ties off-line. Thirdly, an off-line network typically includes up to a dozen strong ties whereas online networks easily accumulate hundreds of Friends (strong ties) (Gross & Acquisti, 2005).

Worldwide usage of online social networks (SNSs) has increased exponentially and there are new and significantly higher privacy leakage concerns as compared to traditional Web sites. SNS users are encouraged to share a variety of personal identity-related information, including physical, mental, cultural, and social attributes but users who do this often believe that such information is accessible only to the SNS and maybe their Friends on that SNS. In reality, the set of entities that can have access to various bits of private information is large and diverse, including third-party advertisers and data aggregators, members in the SNS who are not Friends of the user, and external applications (Krishnamurthy & Wills, 2008).

Data privacy vulnerability through either unauthorised or unintended access is manifested through a variety of factors. For example;

- Users willingly provide personal information without a clear idea of who has access to it or how it might be used.
- The range of privacy settings that SNSs provide are found to be permissive since default

settings allow access to strangers in all SNSs.

- Research into how users make use of privacy controls to limit access, found that between 55 and 90% of users in SNSs still allow their profile information to be viewable and 80 to 97% of users allow their set of Friends to be viewed.
- Much like traditional Web sites, third-party domains track user activity pervasively in SNSs.
- There are no controls to match what information a user makes available with what is needed by other users and applications, often resulting in more user information being divulged to third parties.
- No techniques are instituted to protect privacy leakage to third-party domains for SNSs as is the case for traditional Web sites.

(Krishnamurthy & Wills, 2008)

Data privacy, specifically for the youth, in the context of school communities is a major concern. Ybarra & Mitchell (2008) conducted a USA based research into unwanted sexual solicitation and Internet harassment. “Unwanted sexual solicitation on the Internet”, was defined as unwanted requests to talk about sex, provide personal sexual information, and do something sexual, while “Internet harassment”, was defined as rude or mean comments, or spreading of rumours. Their study indicated that 15% of all of the youth reported an unwanted sexual solicitation online in the last year; 4% reported an incident on a social networking site specifically. 33% reported an online harassment in the last year; 9% reported an incident on a social networking site specifically. Among targeted youth, solicitations were more commonly reported via instant messaging (43%) and in chat rooms (32%), and harassment was more commonly reported in instant messaging (55%) than through social networking sites (27% and 28%, respectively). The researchers concluded that broad claims of victimization risk, at least when defined as unwanted sexual solicitation or harassment, associated with social networking sites, do not seem justified. Prevention efforts may have a greater impact if they focus on the psychosocial problems of youth instead of a specific Internet application, including funding for online youth outreach programs, school anti-bullying programs, and online mental health services (Ybarra & Mitchell, 2008).

From a South African perspective, rape of girls under the age of 15 is an acknowledged social

problem and research indicates that teachers (33%), relatives (21%) and strangers or recent acquaintances (21%) are the major perpetrators (Jewkes et al, 2002). Although Ybarra & Mitchell's (2008) research indicate that the threat posed by sexual harassment of minors appeared to be lower than may be supposed in the USA, the high prevalence of crimes against women and children in South Africa (UNICEF, 2011), necessitates the inclusion of an evaluation criterion to address this issue. The criterion to meet the data privacy risks pertaining to school children is framed as the question:

“Is there a mechanism to restrict access to information about school children?”

### **3.4.3 Technology Accessibility**

The final criterion is, “Does the social media artefact perform with functional equivalence on mobile phones and computers?”

As a result of the inconsistent reach of the various telecommunications infrastructures (poor land-line reach but extensive mobile coverage), research indicates that the bulk of internet users in the developing world will eventually be mobile centric, either as mobile-primary or mobile-only users (Donner& Gitau, 2009). In South Africa, successive studies by Falkenberg (2005), Esselaar et al (2010), Pavon & Brown (2010) and Abrahams & Goldstuck (2010) illustrate that the high costs of telecommunications keeps the Internet out of the reach of the majority of the population. The poverty of communities in rural and township areas and the high prevalence of mobile phone usage (Kreuzer, 2009) drive the high usage of mobile Internet (Chigona et al, 2009) in South Africa.

The proliferation of mobile phone users in the developing world as opposed to those who have access to the Internet through a computer, makes this criterion an absolute necessity for this study to have validity in South Africa and other developing countries.

### **The Criteria for Artefact Evaluation**

The following table results from adding the defining characteristics of SNSs to the other factors that could influence school communities functioning as a virtual community in South Africa;

**TABLE 4: FUNDAMENTAL SOCIAL MEDIA EVALUATION CRITERIA**

Category	Criteria	Rationale
SNS Characteristic	Are users able to articulate and make visible their social networks?	This would be fundamental to open communication and promotes the growth of the network (boyd & Ellison, 2008).
	Can users create their own unique profiles?	A necessary factor to ensure that members are identifiable to other members in order to establish 2 way communications. The profile establishes a basis for trust, based on profile similarity (Golbeck, 2009), without which the network would not function.
	Can the user set or regulate/restrict, according to user discretion, the visibility of its profile?	Ability to manage data accessibility is vital to combat the numerous ways in which harm may be caused by unfettered access to personal data (Gross & Acquisti, 2005), (Krishnamurthy & Wills, 2008).
	Are users prompted to identify others in the system with whom they have a relationship through a bi-directional confirmation of Friendship?	Ensures that users maintain control over their own networks and facilitates the tendency towards homogeneous networks (boyd & Ellison, 2008).
	Does the service enable the public display of connections/relationships?	This aspect of SNSs is seen to be desirable across a broad sample of sites (boyd & Ellison, 2008) which tends to indicate that members positively value the visibility of their personal networks as it increases

		<p>their “social presence” (Kaplan &amp; Haenlein, 2010). The higher the “social presence”, the larger the social influence that the communication partners have on each other’s behaviour (Kaplan &amp; Haenlein, 2010).</p>
	<p>Does the service provide a mechanism for users to leave messages on their Friends’ profiles?</p>	<p>Enables open communication across the network. The apparent appeal is encompassed in the easy ability to broadcast any message to a member's entire network. It lowers the “immediacy” aspect of “social presence” as the medium is asynchronous (Kaplan &amp; Haenlein, 2010) but the convenience factor of asynchronous communication could more than offset the loss of immediacy.</p>
	<p>Does the service have a private messaging feature similar to a web based email service?</p>	<p>Enables confidential communication between entities in a network. The increased “intimacy” raises the “social presence” (Kaplan &amp; Haenlein, 2010).</p>
Data Privacy	<p>Does the service provide a mechanism to restrict access to information about children?</p>	<p>In any social service setting, on-line data concerning children requires special protection (ITU, 2009). In the schooling, healthcare and social support situation, the concern for protection of children would be similarly high.</p>

Accessibility	Does the service perform with functional equivalence on mobile phones and computers?	Services functioning on mobile phones provides service accessibility to a far larger population than those functioning on computers only (Donner& Gitau, 2009). Accessibility directly impacts on any services effectiveness to perform for those who require it.
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These fundamental criteria would themselves undergo an evaluation for weighting to determine their relevance to the social service activity of schooling.



### **3.5 Evaluation**

In order to perform a contextual evaluation, the criteria for evaluation would need to be justified through the subjective allocation of a weighting that reflects the relative importance of each criterion to meeting the purpose of serving school communities.

#### **3.5.1 Weighting Evaluation Criteria**

As each one of the criteria have been justified for selection on the basis of their functional value in the context of social service-based communities, the weighting assessment will reflect each criterion's significance in specifically serving school communities, relative to the other criteria in the evaluation list.

A weighting is applied to a criterion in order to represent the extent of the influence that each criterion should carry in the overall assessment process. This weighting is a numerical representation of the level of relative importance that the researcher accords to each criterion within the context of the entire list of criteria. The process of apportioning weightings to the criteria is both subjective and objective. The subjective approach is applied in determining the extent to which each criterion meets the needs of school communities according to the subjective assessment, based upon the researcher's experiences and perceptions of the social reality formed by the analysis of qualitative data (Myers, 1997), in gaining an understanding of school communities in the previous phase. The objective approach is applied in ranking each criterion relative to each other in a predictably explicable manner.

The weighting scale consists of 5 levels ranging from 0 through to 2.

The range of the scale aims to reflect the equal importance accorded to “community collaboration and communication through SNS functions”, “data privacy & security for information about school children” and “functionality on mobile phones”.

The weighting scale would be applied with the following assessment of significance for purpose;

- 0 = criterion not required or does not exist
- 1 = neutral (no more nor less value due to school community context)
- 1.2 = slightly higher value when applied in the school community context

- 1.5 = significantly higher value when applied in the school community context
- 2 = an essential function in the school community context

A qualitative, subjective assessment of each of the evaluation criteria in the context of a virtual community comprised exclusively of school supporting communities, is presented in Appendix A, entitled, “Weighting Assessment of Social Media Evaluation Criteria”.

### **3.5.2 Evaluation Execution**

The execution entails an evaluation of each of the selected IT artefacts against the weighted set of criteria in a subjective assessment of repetitive processes. Each social media artefact is subjected to empirical assessment against the selected criteria to determine a score that reflects their ranking relative to one another. Evaluative research of IT artefacts may be summative, emphasising performance and attainment of objectives, or formative, that is designed to illuminate and learn (Farbey et al, 1999). This evaluation is a qualitative assessment of the extent to which each social media artefact meets the functionality demanded by each criterion and is formative. The evaluation process entails the practical testing of each of the selected social media by pursuing the following steps;

- The researcher signed up as a user on each of the selected social media artefacts.
- Each of the evaluation criteria were applied to all of the selected artefacts. First an exploratory testing of *Facebook* was performed, followed by explanatory testings of *LinkedIn*, *Twitter* and *Mxit* in order to provide comparative results.
- Each evaluated artefact received a subjective performance rating, on a scale ranging from 1 (least compliant) to 4 (most compliant), for each of the evaluation criteria.
- Evaluation was performed by executing specific actions in order to assess the functioning of the artefacts in accordance with the demands of the evaluation criteria.
- Where sufficient information could not be obtained through functional testing, supplementary information was sought from the information provided by the various artefacts' web sites and “help” resources.
- The results of the evaluation were recorded along with their performance rating scores. Firstly, a record of the extent to which the evaluated criterion is present and secondly a record of how it compares to the same criterion in the other artefacts in the evaluation. (See Table 11).
- The weighting factor of each evaluation criterion was applied to the performance rating score and the results are reflected in the table below.

**Table 5****SNS Evaluation Table**

Evaluation Criteria	Weighting	Facebook		LinkedIn		Twitter		Mixit	
		Evaluation Score	Weighted Score	Evaluation Score	Weighted Score	Evaluation Score	Weighted Score	Evaluation Score	Weighted Score
Can users create their own unique profiles?	1	4	4	4	4	2	2	2	2
Are users able to articulate and make visible their social networks?	1	4	4	4	4	2	2	4	4
Are users prompted to identify others in the system with whom they have a relationship through a bi-directional confirmation of Friendship?	0	4	0	4	0	0	0	4	0
Can the user set or regulate/restrict, according to user discretion, the visibility of its profile?	1	4	4	3	3	0	0	0	0
Does the service enable the public display of connections/relationships?	0	3	0	2	0	2	0	0	0
Does the service provide a mechanism for users to leave messages on their Friends' profiles?	1.5	4	6	4	6	2	3	4	6
Does the service have a private messaging feature similar to a web based email service?	1.2	1	1.2	4	4.8	0	0	3	3.6
Does the service provide a mechanism to restrict visibility to profile information and postings of school children?	2	0	0	0	0	0	0	4	8
Does the service perform with functional equivalence on mobile phones and computers?	2	2	4	2	4	4	8	4	8
<b>Weighted Evaluation Score out of 38.8</b>		23.2		25.8		15		31.6	
<b>Rated Performance Percentage</b>		59.79%		66.49%		38.66%		81.44%	

### 3.6 Implications arising from Evaluation results

The outcomes of the evaluation process shows that *Mxit* is the social media artefact most able to meet the functional requirements of school communities in South Africa, followed by *LinkedIn*, *Facebook* and least suitable by a long way, *Twitter*.

*Twitter's* major strength lies in its complete functionality on mobile phones but in the context of school communities, it does not have much to offer outside of its ability to foster social discourse.

*Facebook* and *LinkedIn* are almost on a par in this evaluation with scores of 60% and 66% respectively. *LinkedIn* provides a superior private communication facility between Friends/Contacts but *Facebook* offers better user control over the visibility of profile data and better capacity to display user's networks. However, neither of them provide an effective mechanism for selectively restricting access to data about or communications with children. In addition, their functionality on mobile platforms are limited.

With an evaluation score of 81%, *Mxit* on the other hand, performs well both as a mobile phone-based service and in its ability to control access to information about or from children. It only falls short in its capacity to gather richer profile data and in its ability to control visibility of that profile.

*Mxit* may therefore be viewed as being complementary to *LinkedIn* and *Facebook* rather than substitutionary. The implication of these results is that a single social media solution suitable for serving the needs of school communities in South Africa does not lie with any of the particular social media artefacts evaluated and would more likely require a specifically constructed solution.

In addition to the relative scoring of the evaluated artefacts, 2 of the defining characteristics of SNSs,

“Are users prompted to identify others in the system with whom they have a relationship through a bi-directional confirmation of Friendship?”

and

“Does the service enable the public display of connections/relationships?”

were deemed to be entirely inappropriate for functions for school communities. Whilst weightings of the criteria were being considered; these criteria, which are considered fundamental characteristics of SNS, were critically assessed and found to not meet the needs of the envisaged networked school community. It therefore follows that it would not be possible for any of the

artefacts in their current forms, to provide a complete solution.

### **3.7 Conclusion**

The research question posed was; To what extent are social media able to provide functions suitable for supporting community activities in support of school governance? Having established an understanding of social media technologies and their potential to serve as agents for democratic activities and public service communications, this research evaluated the capacity of specifically selected artefacts, *Facebook*, *LinkedIn*, *Twitter* and *Mxit*, to provide functions suitable for supporting community activities in support of school governance. From an artefact specific point of view, an ideal solution was not found. The results indicate that the technologies deployed by the social media artefacts could indeed provide many of the necessary functions but a solution that needs to perform within the contextual requirements of the schooling environment does not lie within the capability of any single social media artefact evaluated. A combination of various functional elements of each of them, contained within an appropriate framework to serve the needs of school communities, is required. In some critical aspects, the evaluated social media artefacts could never meet the requirements of school communities. This implies that the fundamental SNS design, as articulated in their “defining characteristics”, is not suited to the delivery of social service communications and collaboration that are necessary to service school communities. A complete solution would require a new category of social media artefact to be developed.

## PHASE 3

### Social Media and Democratic School Governance: A Networked Social Service Media Artefact Design

## **4.1 Introduction**

This phase of the research continues with the “Design and Development” step of the DSRM (Peppers et al., 2008). In the previous phase an evaluation of selected social media artefacts led to the conclusion that an instantiation of an established SNS would not be suitable for enabling community participation in school governance. Therefore, a critical interpretive evaluation of the functional capabilities of individual components from across the spectrum of categories of social media artefacts is performed in order to assess their suitability for inclusion in a new artefact that would serve the needs of school communities in South Africa to democratically participate in the governance of their schools. Once again, the systemic and nationally pervasive nature of the schooling education problems that motivate the need for effective school governance, as alluded to in the first phase, as well as the lack of any representative social-networked school communities, precludes direct research-based interactions with any particular group of stakeholders.

Consequently, apart from data extracted from documents from both the public and academic spheres, this research is based on data derived from the subjective assessment of social media artefacts in the context of a school community and descriptions of them obtained from the providers of the services that offer them, as well as the data derived from the outcomes of the two preceding phases of this study. The critical perspective of the study is obtained by assessing the impact of state powers exercised through various legislations, on the structures and roles of stakeholders in the schooling scenario. Hence, specific legislation also provide data for this study.

The result is a descriptive design of a conceptual social media artefact to specifically serve the needs of school communities and enable co-operative, democratic school governance. Co-operative governance is best described as an interactive approach to education in which all stakeholders are represented and take co-responsibility for the effective and efficient operations of their schools (Van Wyk, 2004). The objective of this phase of research is therefore to achieve a conceptual design of a new social media artefact that could serve the needs of SGBs and school communities, in response to the research question;

“What functions and design features are required of a “networked social service media” artefact to generate the social capital benefits that would motivate school communities to adopt them?”

### **4.1.1 The Layout of the remainder of the paper**

A review of literature pertaining to participative democracy, virtual communities and the factors that could influence the likelihood of school communities functioning as virtual communities, follows

this introduction. Pursuing the research question arising from the literature requires an orderly, predetermined structure to ensure that a comprehensive and academically sound evaluation process is followed. The section following the literature review therefore focuses on the research methodology, wherein the appropriate paradigm and framework for conducting the evaluation is established. The objectives and context of this study determines that it adopts a critical interpretive epistemology to conduct a goal-based evaluation of an IS as such. No examples of a critical interpretive IS evaluation could be found; therefore an appropriate framework is devised. The framework is then followed in a systematic manner in which the evaluation data are identified and arranged, the context of the evaluation is established and the purpose of the evaluation is articulated. Thereafter, a model representing the evaluation object is hypothesised and presented in order to articulate an organisational context for the evaluation and identify the various stakeholders. The goals of the evaluation are then examined from the perspective of the social objectives which motivate them, in order to establish the critical research perspective of this study. This is followed by identifying the objects of the evaluation which are categories of social media artefacts identified in phase two. Finally, setting the scene in preparation of the evaluation process, an evaluation strategy to pursue a “goal-based evaluation of IT-systems as such” is articulated along with the roles to be performed by the evaluator to process a critical interpretive evaluation.

The goal-based evaluation is executed as follows;

- Validating the stakeholder practices in order to determine whether they are consistent with practices that promote participative democracy and testing the design of the hypothesised model of the evaluation object.
- Assessing the functions of the stakeholders and deriving the goals of the conceptual IS by determining through critical assessment, the extent which they comply with activities that enable participative democracy within school communities.
- Validating the hypothesis represented by the model of the object of evaluation by testing whether the structure presented in the model can accommodate the functions of the various role-players.
- Deductively and dialectically evaluating the different categories of social media components in terms of their suitability to meet the goal of enabling the SGB practices by assessing their functioning from the perspectives of school communities and democratic practices and identifying the need for changes where applicable (Lagsten &



Goldkuhl, 2008).

- Concluding by describing a conceptual social-media artefact design from the results of the evaluation expressed in terms of; supporting structures to enable the service to work, design features of the social-media components and service functions enabled by the service.

## **4.2 Literature Review**

In phase one of the overall study, it was established that SGBs may be empowered through participative democratic practices to achieve social emancipation from a failing schooling system. In phase two it was determined that an instantiation of any of the selected examples of established social media artefacts to serve as enablers for school communities, is not feasible due to specific shortcomings in the functional capabilities and design of those artefacts. These findings motivate the need to define an IS solution or service specifically for the school community context. A conception is sought of specifically selected social media technologies combined into a purpose designed, composite IS solution that enables the functioning of participative democracy in pursuit of effective school governance. A review of literature on participative democracy, virtual communities and the factors that could influence the likelihood of school communities functioning as virtual communities, establishes a contextual background for this study. The reviewed literature is derived mainly from academic papers but also includes sources from the public domain.

### **4.2.1 Participative Democracy**

At a national political level in South Africa, a weak form of representative democracy prevails due to the lack of individual accountability of party-appointed representatives and the lack of opportunity for ordinary citizen participation in policy formulation which takes place at the ruling party's restricted National Conferences (ANC\*, 2011). South Africa's current practice of political democracy may also be described as majoritarian democracy which foregoes the benefits that may be gained through the consideration of alternative views in decision making under a more consensual form of democracy. This form of representative democracy, as exercised by the super-structure of the state (Foucault, 1980) excludes the participation of most of the micro-structures (Foucault, 1980) of citizen formations such as opposition parties, civil society formations and school-based communities. The lack of citizen influence at the macro-structure level motivates the desire of society to access the means of participative democracy at its micro-structural levels (Haus

& Sweeting, 2006).

“The case for participatory democracy is based on the claim that the construction, articulation and promotion of the common good cannot be delegated, but must evolve from the communicative interactions of active citizens (Barber, 1984; Fishkin, 1991; Pateman, 1970). It is the active citizens (freed from the cage of party discipline and the hunger for power, but also from the self-interested desire to get as many preferences satisfied as possible) who know best about the common good” (Haus & Sweeting, 2006).

As citizen participation at the national, macro-structural level is limited, participative democracy exercised at the local level, by the micro-structures of school communities through SGBs, should provide an effective enhancement to South Africa's general state of democracy.

“Democratic participation for school communities may be described as those activities that facilitate processes that foster decentralised government and administration of schools and which make it possible to broaden the base of public participation” (Universal Declaration on Democracy, 1997).

However, the problem with participative democracy is generally seen in its practical application. Critics argue that as direct forms of democracy require that citizens themselves make decisions on policy matters, whether through referenda, community meetings, citizen initiatives, or other direct means, the high level of resources and effort to practice it carries implications of difficulty in functioning efficiently in large polities (Dalton, Burklin & Drummond, 2001). In these cases, a streamlining of the decision-making process, inevitably results in reverting to a system of representative rule. Participative or participatory democracy is a combination of representative and direct democracy (Hacker & Van Dijk, 2000).

Therefore, a mechanism, such as that offered by social media, which provides the means of overcoming the practical difficulties of participative democracy (Hacker & Van Dijk, 2000), (Dahlberg, 2001), (Kyriakopoulou, 2011) is considered. Effective knowledge sharing within communities can be achieved when the medium used encompasses active feedback mechanisms. Community involvement through a knowledge sharing and collaboration platform, as are typically provided by social media, can enable democratic activity (Hacker & Van Dijk, 2000), (Tiواني & Bush, 2001). Specifically, SNSs have been assessed to be significant role players in facilitating democratic communication through the provision of the following categories of activity which will be referred to as “Democratic Activities” throughout the remainder of this study;

- Information provision / Access to information
- Preference measurement / Referenda, polls and representation
- Deliberation / Opinion formation
- Will formation / Organisation formation

(Tambini, 1999).

#### 4.2.2 Virtual Communities

The term “virtual community” was coined by Howard Rheingold (1993) in his book of the same name, to refer to “people who use computers to communicate and form friendships that sometimes form the basis of communities”. This fundamental description has been refined and expanded upon by others (Lee et al, 2002). A virtual community may be broadly understood to be “people with shared interests and goals for whom electronic communication is a primary form of communication, as groups of people who meet regularly to discuss a subject of interest to all members and groups of people brought together by a shared interest or geographic bond.” (Ridings & Gefen, 2004).

The extent to which virtual communities may differ from communities that are not connected through computer mediated communications requires interrogation to ascertain whether they have any specific differentiating characteristics beyond their electronic connectedness.

In some ways, school communities represent Tönnies’ (1887) idea of community as *Gemeinschaft*, which implies a well-connected, place based, collective, village-like community. However, in an increasingly electronically connected world, this notion of community represents an overly romanticized image of community and ignores more contemporary forms of community (Foth, 2006).

Nevertheless, empirical studies conducted in China on a blog site (Sina) and SNS (Xiaonei), found that the topology of the communities formed on the blog site was not assorted (Friends or followers were not known to each other but drawn by the blog topic) but on the SNS site, they were largely assorted (Friends have off-line relationships with the user) (Fu, Liu & Wang, 2007).

The degree to which people are inclined to participate in virtual communities, was ascertained through a study which established that S. Milgram's (1967) so-called “*six degrees of separation*” phenomenon, based on an experiment which proved that any two people in the United States are connected through about 6 intermediate acquaintances, does apply equally to computer mediated

social collaboration networks. The implication being that we are inclined to replicate our off-line social networks in the on-line environment (Elmacioglu & Lee, 2005).

From an SNS perspective, the research referred to above indicates that users, being members of a virtual community, tend to establish connections with friends who are also off-line friends. As such, SNSs tend to be an extension of normal socialising. Users tend to search for their friends and acquaintances rather than browse for strangers. Therefore, SNSs may be described as “networked publics”. Besides off-line friendships, other off-line demographic factors such as language, locality and interests can play a role in establishing virtual community acquaintances (boyd & Ellison, 2008). It would appear therefore that virtual communities tend to replicate off-line communities and no significant differences exist between the two.

### **4.2.3 The Appeal of the Virtual Community Concept**

Formal schooling is largely a public service in South Africa and fulfils the social need for education of the youth for the benefit of society. The state's role in the provision of this public service, makes it incumbent upon society to be vigilant about the temptation of the state to manipulate the processes of education for its narrow ideals (Dewey, 1916). School communities, in the context of micro-structures of society that exercise their vigilance over and engagement with schools through a variety of roles, has been covered extensively in the first phase of this research. It is evident that society is inclined, where conditions permit, to form communities in support of schools. The question now arises as to whether the functioning of school communities as virtual communities would be a natural progression, given the means to do so.

The utilisation of social media to facilitate social or public services through the enablement of participative democratic activity, may be presumed to be appealing as the means of ensuring citizen vigilance and participation in meeting a social need for successful education of the youth. In the absence of research that conclusively states as much, a review of researched literature pertaining to factors that could impact upon the appeal of the concept of virtual communities, follows.

The appeal of the concept of virtual community, is manifest through the convergences between social networks and consumer-created content, and the consequent formation of communities of interest and practice, providing opportunities for the greater visibility and community-building potential of “cultural citizenship” practices. The presumably appealing prospect of cultural citizenship is defined as citizen participation and involvement that is measured as much through everyday life, leisure, critical consumption and popular entertainment as it is through debate and

engagement with politics (Burgess et al, 2006). In order to make a determination regarding the appeal of the virtual community concept in the context of schooling, the capacity for social media to serve as a form of public service media and the extent to which communities may find the medium both accessible and socially rewarding, is interrogated;

#### **4.2.3.1 Public Service Media for Enhanced Democracy**

Where the democratic process assumes that individual citizens have the capacity to hold elected officials accountable, public service media enhance democracy. In practice, political accountability requires a variety of institutional arrangements, including free and frequent elections, the presence of strong political parties and a media system that delivers a sufficient supply of meaningful public affairs information to catch the eye of relatively inattentive citizens (Curran et al, 2009). A media system that delivers public affairs information is referred to as “public service media” (Council of Europe, 2009). Broadcast (radio and television) public media tend to minimize the knowledge gap between the advantaged and disadvantaged by making news more accessible and therefore contributes to a more egalitarian pattern of citizenship (Curran et al, 2009). However, broadcast media, whilst being relatively easily managed for public service media purposes, is losing its relevance to younger generations who have moved to social media for their information and social discourse and away from the traditional broadcast media (Council of Europe, 2009). Similarly, in South Africa, in spite of the low levels of access to the Internet due to high telecommunications charges (Abrahams & Goldstuck, 2010), research strongly indicates that the youth make extensive use of social media through the mobile telephony based Mxit platform (Kreuzer, 2009). Change has been observed even within the ambit of social media itself where trends indicate that younger generations have adapted their behaviour in recent years and are increasingly moving away from micro-blogging and embracing macro-blogging through SNSs (Lenhart et al, 2010). The question therefore arises as to whether social media could be deployed as public service media to deliver relevant public affairs information. That social media can indeed, from a technological functioning perspective, perform the functions that enable democratic participation by citizens in general, has been well established (Tambini, 1999), (Hacker & Van Dijk, 2000), (Tiwani & Bush, 2001). Lee et al, (2002) provide extensive examples of the enablement of democratic discourse by specific virtual communities through a variety of discussion groups and forums using only email and blogs. However, whilst examples of the deployment of more functionally rich social media, such as SNSs, to foster democratic participation, are few; the likelihood of a functionally rich social media artefact

contributing similarly in a local school community environment in the South African context, may well be mostly dependent upon the levels of accessibility and appeal of the social media, relative to broadcast media.

#### **4.2.3.2 Social Media Accessibility**

Accessibility to social media is dependent upon a variety of factors, each one of which are experienced to varying degrees in different localities and communities.

##### **4.2.3.2.1 Economic Barriers**

“Weak competition throughout the state dominated sectors has translated into higher costs for firms and citizens: in the telecom sector, for instance, the monopoly in the fixed line segment has led to a situation where prices for domestic and international communications are extremely high by world standards” (OECD, 2008).

Empirical research into a variety of long-term factors that drive ICT adoption in Africa and OECD countries (Countries belonging to the Organisation for Economic Cooperation and Development) reveal that; with the single exception of Gini index, which measures income inequality, South Africa had the fundamentals for a high rate of ICT adoption (Bagchi & Udo, 2007). In respect of GDP per capita, South Africa was in a very favourable situation for strong ICT adoption. Over the 5 year period 2006/07 to 2010/11, South Africa's GDP had grown by 51.93% (Department of National Treasury Department, Republic of South Africa, 2007, 2011). As South Africa's population growth over the decade 2001 to 2011 was 12.7% (Stats SA, 2011), the GDP per capita has enjoyed significant growth. This favourable but transient state for South Africa serves to amplify the contradiction presented by the low rate of ICT adoption in South Africa.

The pervasiveness of the infrastructural capacity established by the private sector to provide mobile networks has driven under-privileged communities to access the Internet through mobile devices (Kreuzer, 2009), (Chigona et al, 2009) but the lack of political will to create the conditions for open competition in the telecommunications sector, ensures that the costs of these services remain high (Esselaar et al, 2006). Therefore, the high costs of telecommunications keeps the Internet out of the reach of the majority of the population in South Africa (Falkenberg, 2005), (Esselaar et al, 2010), (Pavon & Brown, 2010), (Abrahams & Goldstuck, 2010) and is a major inhibitor of access to social media, especially for underprivileged communities.

#### **4.2.3.2.2 Technology Aversion**

In the context of an ever-changing and growing awareness of social media wherever the infrastructural capacity enables their functioning, researchers have found that social media are not necessarily accessed intuitively (Rheingold, 2008), (Burgess et al, 2006). In order to address this issue, recommendations are proposed that the accessibility of social media should be promoted through the inclusion of “participatory media” usage into the schooling syllabus as a means of enabling the effective engagement of the youth in civic, political and general public discourse through the use of social media (Rheingold, 2008). Also, human talent and digital creativity should be promoted outside formal school and workplace environments in order to nurture societal and cultural values that promote a socially inclusive innovation culture and economy (Burgess et al, 2006).

From the perspective of individuals within organisations of any kind, public or private, there is a need to adopt a “social culture” to foster access of social media (Kanter & Fine, 2010). Essentially this “social culture” involves organisations not only monitoring what is said about them in social media but also engaging with commentators through the medium in order to ensure that they partake in the public discourse about them. The realisation that social media not only provide an unfiltered view of public perceptions and opinions but also the opportunity to engage and stay connected to multiple levels of stakeholders, motivates policy changes concerning aspects like employee access to social media and organisational communication policy through social media. In many respects it requires a radical change of mindset by an organisation to implement a social culture (Kanter & Fine, 2010). A similar mindset change is likely to be required by schools in the event that they choose social media to engage with their communities.

It is apparent from the above research that whereas broadcast media is accessible without participation by the consuming citizen, social media involves a level of recipient engagement which can present a barrier to access unless actions are taken to impart basic social media skills that invoke a mindset change in the consumers and organisations.

#### **4.2.3.2.3 Public Media Mistrust**

Lack of trust of the public media may tend to motivate media consumers to overcome inhibitors of accessibility to social media. That blogs have diminished the power of traditional “elite” media as gatekeepers and agenda setters in the production of news and public debate, provides a strong indication that social media, whilst admittedly not encumbered by rules and regulations that attempt

to ensure truthfulness and accuracy, have the power to circumvent bias and restrictions imposed by either political or business interests (Meraz, 2009). The pro-democracy uprisings in Arab states during the so-called “Jasmine Revolution” provided a dramatic demonstration of the powerful role that may be played by social media, through the dissemination of “citizen journalism”, in bypassing state controlled mass media and fostering cohesive popular support for social emancipation (Cottle, 2011), (Joseph, 2012). Explaining the galvanising property that social media has to create cohesion, Joseph (2012) offers, “it is easier to desire change and to be willing to act to effect it if one knows that others feel the same way.”

On the other hand Goode (2009) raises concern at the dangers of assuming that citizen journalism, simply by being disseminated through social media, is not subject to the influences of gatekeepers and agenda setters. However, from the specifically public service media perspective, research commissioned by the Council of Europe in 2006, does indicate that “new media” (media beyond traditional print and broadcast) could enable advancements in the following public service tasks;

- Inform the public of events of significance to their daily lives through alerts and “information on demand”.
- Encourage participation in public debate.
- Provide “value for money” by moving towards the “*Anything, Anytime, Anywhere*” paradigm.
- Provide quality entertainment.
- Educate.

A vital trust factor therefore seems to promote social media usage over broadcast media and appears to motivate the public to attempt to overcome technology aversion barriers.

#### **4.2.3.3 Social Reward through generation of Social Capital**

The concept of social capital requires definition for the sake of clarity and context. The point is approaching at which social capital comes to be applied to so many events and in so many different contexts as to lose any distinct meaning (Portes, 1998). Probably the first definition of the concept was offered by Bourdieu (1985) as,

“the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition.”



which he further clarified by asserting that “the profits which accrue from membership in a group are the basis of the solidarity which makes them possible” (Bourdieu, 1985). To varying degrees, various works refer to the concept in a way that indicates that social capital stands for the ability of actors to secure benefits by virtue of membership in social networks or other social structures. To possess social capital, a person must be related to others, and it is those others, not himself, who are the actual source of his or her advantage (Portes, 1998). It may therefore be assumed that the rewards that may accrue to actors or members of a social network, is the “social capital” that drives their affiliation.

This study adopts Bourdieu's (1985) definition of social capital. Whilst unlikely that his references to social networks were referring to computer mediated networked communities, this study is focused on social networking through the Internet. The Internet as a factor does not promote social capital or democratic participation per se. Rather it is dependent upon whether the Internet is put to facilitate either informational, communicative, recreational, social, product consumption or financial management uses. Uses that promote “social capital” are likely to promote democracy (Pasek, More & Romer, 2008). If citizens are less connected to one another and less trusting, democracy suffers. Similarly, a knowledgeable public provides a strong foundation for democracy; political knowledge has therefore been included in many analyses as an outcome of social capital. Internet usage for information or information exchange purposes, such as those provided by social media, provide the most social capital benefits. As a category of social media suitable for generating social capital benefits through facilitating social relationships, SNSs are the best equipped (Pasek, More & Romer, 2008). The social capital benefits generated through the community formation and collaboration capabilities provided by social media, cannot be similarly provided by broadcast media.

However, comparative research also reveals that not all SNSs generate social capital equally but their capacity to do so is dependent upon their function and design features (Pasek, More & Romer, 2008). Therefore, defining an SNS solution to promote the generation of social capital at the school community level would involve evaluation of the functions and design features of artefacts from across the spectrum of social media categories in order to achieve a solution with appropriate features.

#### **4.2.4 The Research Question**

The reviewed literature indicate that;

Participative democracy may be facilitated in schools through the utilisation of social media. School communities could form virtual communities on the basis of affiliation to a school and, where circumstances permit, on the basis of community friendships. The overcoming of accessibility issues, either due to infrastructural and economic constraints or user aversion to technology, requires on-going efforts by organisations and individuals. However, the benefits for society that may be accrued from the utilisation of social media to generate social capital, could serve to motivate the adoption of social media technologies. More especially, social media in their more complex and composite forms, as in SNS artefacts, which tend to comprise of functions from a number of different categories of social media, combined into a single community networking artefact, tend to be especially appealing. In this composite form, social media could provide a channel for engaging citizens through a “networked social service media” which cannot be similarly provided by traditional social service media such as electronic broadcast media and the printed press.

This research therefore seeks to perform an evaluation that provides a response to the question; “What functions and design features are required of a “networked social service media” artefact to generate the social capital benefits that would motivate school communities to adopt them?”

### **4.3 Research Methodology**

The term methodology in this instance refers to the method(s), techniques, framework and paradigm used in the conducting of this specific study (Mingers, 2001). The objectives of the evaluation determine the methodological approach (Kaplan & Maxwell, 2005). The objectives are stated in the research question, “What functions and design features are required of a networked social service media artefact to generate the social capital benefits that would motivate school communities to adopt them?” The responses to the question, “What and How?” determines the objective of the research (Travis, 1999). The objective is therefore to determine what functions and design features of a networked social service media artefact would generate social capital benefits for school communities and how would they do so. On the one hand, “functions and design features” are technology factors which could be analysed both quantitatively and qualitatively but “social capital benefits” are entirely qualitative factors by their nature and therefore qualifies this research as mainly qualitative. This study could therefore be referred to as a mixed methods research with a qualitative bias (Johnson & Onwuegbuzie, 2004).

Qualitative research encompasses activities of a framework (theory), that reflects the researcher's perception and ideas of reality (ontology), that specifies a set of questions (epistemology) that the researcher examines in various ways (methodology, analysis). Together these activities provide a paradigm (Denzin & Lincoln, 2005). Being a qualitative study would usually result in the adoption of an interpretive epistemology. However, given the social bias of the research topic, the issues of social order and power relations provide an underlying context which leads to the realm of critical social theory. The epistemological perspective is shaped by the Foucauldian critical research performed on school communities in phase one of the overall study. It is therefore more accurate to describe the research epistemology as critical interpretivism.

Critical interpretivism implies that interpretive IS researchers need to consciously adopt a critical and reflective stance in relation to the role that the ITs which they describe, play in maintaining social orders and power relations in organizations (Doolin & MacLeod, 2005).

The method associated with critical interpretivism is characterised thus;

“Through questioning and deconstructing the taken-for-granted assumptions inherent in the status quo and by connecting local understandings or interpretations of IT to broader considerations of social power and control and by asking how these may be shaped or organized in a certain way, and for whose benefit they may operate. Partly this involves

adopting a more politically informed position regarding the agency of IT in social and technological change” (Doolin & MacLeod, 2005).

### 4.3.1 Evaluation Paradigm & Framework

The development of any evaluative framework must be rooted in a chosen evaluative paradigm (Grimsley & Meehan, 2007). This evaluation is focused on intangible, qualitative criteria associated with the generation of social capital through the enabling of participative democracy (Pasek, More & Romer, 2008), such as information provision, preference measurement, deliberation and will formation (Tambini, 1999). The evaluative paradigm is therefore a critical interpretive evaluation (Walsham, 1999).

The following interpretive evaluation frameworks in IS were assessed for their suitability;

Walsham (1999) identifies the main elements in the design of an interpretive approach to IS evaluation as follows:

- *Context* arises from an analysis of stakeholder assessments, both current and historical.
- *Purpose* is related to the stage of development of an IS. At the early stage it supports feasibility assessment, during development it feeds back on design progress, and post-implementation it focuses on achievement of goals. For at all stages, purpose is concerned with achieving understanding (preferably shared).
- *Content* relates to the system goals (functional, economic, human, organisational, social and political), acknowledging that stakeholders will have different perspectives and motives in relation to the project.
- *Facilitation* requires the interpretive evaluator to assume a number of roles: facilitator of reflection, learner, teacher, reality shaper and change agent.

Lagsten & Goldkuhl (2008) also developed a model specifically for interpretive evaluation of IS;

INITIATE	ARRANGE	EVALUATE	CHANGE & DEVELOP
Identify preconditions	Make entrance Understand the practice Create a model of the evaluation object Identify stakeholder groups Identify possible uses	Carry out dialogue-seminars with different stakeholder groups Analyse activities, problems, strengths and goals Identify change needs Shape change measures Joint valuation Make completions	Use evaluation results Report and inform

**Process model of VISU (Swedish acronym for IS evaluation for workpractice development).**

The assessment of the suitability of either or both frameworks reveals the following problems in

adopting either of them directly for this study;

- 1) This study does not provide an IS per se, for evaluation. Instead it requires evaluation of various functions of artefacts available in the social media realm in order to arrive at a design of a conceptual IS to perform as a “networked social service media” artefact.
- 2) Both assessed methods recommend an idiographic approach; In the “Content” step of Walsham's approach, the views and opinions of various stakeholders are sought. Similarly, in the “VISU” model, the “Evaluate” phase recommends the carrying out of dialogue-seminars with different stakeholder groups. This presents a problem for this particular research on two accounts; The first is fundamentally one of timing or synchronisation inasmuch as an evaluation-led design of a social media artefact is sought for a virtual community which is yet to be formed but paradoxically the virtual community cannot be formed until it is enabled by a suitable social media artefact. The stakeholders therefore lack the context offered by an already established network-enabled organisation or structure. The second is the systemic and structural nature of the social problem presented by the failing schooling system in South Africa. The pervasive effects of the underlying problems extend across the entire system and therefore require engagement at a higher level. Direct engagement at a localised level of specific schools, provide a risk of local biases affecting the research unduly. As a result, the researcher is unable to revert to the recommended practice (Grimsley & Meehan, 2007), (Walsham, 1999), (Lagsten & Goldkuhl, 2008) of direct stakeholder engagement.
- 3) Neither of the models make provision for inclusion of the factors concerning social order and power relations that are fundamental to the critical research perspective implicit in the research question.

Being mindful that the practice of the evaluation of information systems typically seek to answer the 5 fundamental questions;

When? (which phase in the system development life cycle),

Who? (from which stakeholders' perspectives is the evaluation performed),

Why? (objective or purpose of evaluation),

What? (aspects or focus of evaluation) and

How? (methods of evaluation)

(Yusof et al, 2008).

A framework for the conducting of a critical interpretive evaluation of an IS in the particular context

of a design-led evaluation, is devised. The value position adopted for this research (Myers & Klein, 2011) is one that is in favour of participative democracy. Alvesson and Deetz (2000) contend that the three elements of insight, critique and transformation, define a study as critical research (Myers & Klein, 2011). The framework devised incorporates the three elements to guide the evaluation process towards an outcome in favour of participative democracy.

#### **4.3.1.1 The Evaluation Framework**

Grimsley & Meehan (2007) note that there is little experience (at least outside the academic world) of using methods, which seek to interpret and/or quantify the subjective or the intangible, especially in the social service or e-government setting. Being unable to find a critical interpretive evaluation framework for IS that would adequately meet the specific circumstances of this study, the framework devised, takes into account the evaluation practices revealed in the considered models and pursues the fundamental principles of critical interpretivism postulated by Doolin & MacLeod (2005);

- 1) The construction of detailed, local and situated empirical interpretation.
- 2) A reflective approach that reveals (and disrupts) the assumptions and certainties that reinforce the status quo in organizations.
- 3) The connection of interpretation to the wider historical and societal context, and considerations of power and control.

These fundamental principles tend to concur with the three defining elements of critical research. By revealing how information systems are embedded in organising processes and used by individuals and groups, by developing a situated understanding of positions and experiences of people affected by the systems, and by linking such understandings with broader conditions, power relations and social structures, critical researchers (co)create knowledge with transformative and emancipatory intent (Cecez-Kecmanovic, 2005). In particular, to be critical, interpretive IS research must extend beyond the development of IT into the larger historical, economic, ideological, political and cultural context within which such developments occur (Doolin & MacLeod, 2005). The following framework is proposed to perform a critical interpretive evaluation;

- Identifying and arranging the data of the evaluation with a specific focus on data that can provide the critical perspective of the research.
- Establishing the ontological context by confirming the preconditions, both historical and current (Walsham, 1999), (Cecez-Kecmanovic, 2005), (Lagsten & Goldkuhl, 2008), of

school communities in South Africa and the capacity for social media to serve them.

- Establishing the purpose of the evaluation by clarifying the stage of the IS development (Walsham, 1999).
- Identifying stakeholders and their roles (Lagsten & Goldkuhl, 2008) through the adoption of the technique of modelling the evaluation object (Lagsten & Goldkuhl, 2008) in order to determine the different perspectives and motives of stakeholders in relation to the project (Walsham, 1999) and to establish an hypothesis of an organisational context for the evaluation.
- Testing that the value position of participative democracy underlies this research by validating the goals of the evaluation. This is done by assessing their (goals of the valuation) capacity to effect social transformation through the application of a conceptual IS (Walsham, 1999) and its possible uses (Lagsten & Goldkuhl, 2008) to enable democratic school governance (Cecez-Kecmanovic, 2005), (Doolin & MacLeod, 2005) thereby reinforcing the critical perspective of the research.
- Identifying categories of social media artefacts or components to be the objects of evaluation and placing them in the context of the school community setting.
- Determining the evaluation strategy and defining the evaluator's roles (Walsham, 1999).
- Performing a goal based evaluation to inform the design of an artefact by;
  - Validating the stakeholder practices in order to determine whether they are consistent with practices that promote participative democracy and simultaneously testing the design of the hypothesised model of the evaluation object by imposing the required practices of SGBs onto the model so as to ascertain that the model adequately represents all the necessary stakeholders and their interrelationships.
  - Determining the goals of the conceptual IS by extrapolating and deducting what services or functions it would provide to enable the practices of SGBs.
  - Proving the hypothesis presented in the model of the organisational context by assessing its suitability to accommodate the goals of the conceptual IS through a process of dialectically deriving the roles likely to be performed by stakeholders and deductively matching them to the goals of the conceptual IS. Affirming the model design by

imposing the roles onto the model to determine whether it continues to provide a structural and organisational context for democratically functioning school communities.

- Deductively and dialectically evaluating the different categories of social media components in terms of their suitability to meet the goal of enabling the SGB practices by assessing their functioning from the perspectives of school communities and democratic practices and identifying the need for changes where applicable (Lagsten & Goldkuhl, 2008).
- Concluding by describing a conceptual social-media artefact design from the results of the evaluation expressed in terms of supporting structures to enable the service to work, design features of the social-media components and service functions enabled by the service. In this process the interpretive evaluator assumes the roles of facilitator of reflection, reality shaper and change agent (Walsham, 1999) to provide a response to the research question.

A chapter is devoted to each of the above steps.



### **4.3.2 Identifying and Arranging Evaluation Data**

As was noted in the previous phase of this study, the goal of qualitative research is understanding issues or particular situations by investigating the perspectives and behaviour of the people in these situations and the context within which they act. Consequently, qualitative data are gathered primarily from observations, interviews, and documents (Kaplan & Maxwell, 2005). According to the Stanford Encyclopedia of Philosophy, phenomenology is the study of structures of consciousness as experienced from the first-person point of view wherein the aim of the researcher is to describe as accurately as possible the phenomenon, refraining from any pre-given framework, but remaining true to the facts (Giorgi, 1997). As this study is focused on social media artefacts and the functions provided by them, it is a phenomenological evaluation.

However, it is the context created by school communities and the desire for social emancipation that establish the critical perspective that surrounds this evaluation.

One of the tasks of critical research is to generate ‘insight’ or ‘local understandings’ of the phenomena under study (Doolin & MacLeod, 2005). The parameters of insight and local understanding are derived from the application of the phenomena in the context of school communities in South Africa and democratic school governance. These insights and local understanding were expressed in terms of history, power structures and transformation for social emancipation and result from the critical research performed in phase one of the overall study. The outcomes of that phase of critical study provide much of the data for this phase. During qualitative data collection, everything is potential data and the evaluator must work to achieve focus in the data collection process (Kaplan & Maxwell, 2005). In pursuit of this principle, an attempt is made to identify and gather data throughout every step of the execution of the evaluation.

#### **4.3.2.1 Data for setting the evaluation context**

Apart from the reviewed literature that introduces this phase of study, the data for establishing the context of this evaluation is obtained from the two preceding phases of the overarching study which provide a critical insight to schooling education in South Africa, the potential roles of SGBs and an evaluation of the capacity of various SNS artefacts to serve the practices required of SGBs.

#### **4.3.2.2 Data for establishing the evaluation purpose**

The establishment of the purpose of the evaluation is achieved by clarifying the stage of the IS development. The data for this determination originates in the previous phase of this study which

concluded that an established social media artefact to meet the evaluation criteria, does not exist. Therefore, this phase would be focused on performing a design-led evaluation. Design is by necessity, a precursor of any development and is therefore an early stage activity in the development of an IS.

#### **4.3.2.3 Data for identifying stakeholders**

The data for identifying stakeholders and their roles are sourced primarily from the outcomes of phase one where the historical influences on present structures in schooling in South Africa and the power relations between the state and society are expressed. Data in the form of legislation that reflects those power relations are obtained from the Constitution of the Republic of South Africa, No. 108 of 1996 (The SA Constitution) and legislation passed by the South African state in the form of The Public Service Act, 1994 and The South African Schools Act, No. 84 of 1996 (SASA). The SA Constitution and the Public Service Act serve to define the relationship between the state and society in the provision of public services whilst the SASA refers to various stakeholders in the context of the schooling scenario in South Africa. A model is created to represent the relationship between the state and society as stakeholders in the provision of public services in general. The model is then adapted for the schooling scenario in order to identify the relationships between the stakeholders in a school community context and the performance of their specific roles.

#### **4.3.2.4 Data for defining the objectives of the conceptual IS**

The objectives of the conceptual IS in this critical interpretivist IS study are broadly defined as the achievement of transformation for social emancipation. The data for defining the objectives of the conceptual IS would be sourced from two primary sources;

- Firstly, reviewed literature informs the researcher of the constructs of social capital which may be generated for society. Literature covering the topics of participative democracy, virtual communities, public service media, social media accessibility and social capital are sourced primarily from academic papers as well as some sources from the public sphere.
- Secondly, community practices for achieving democratic school governance, referred to as “School Governance Practices” in this study, are obtained from the conclusions reached in phase one of the overarching study.

The objectives are therefore framed in terms of both social capital benefits and practices for achieving democratic school governance. In order to achieve a congruent view of the objectives, a correlation between the two sets of objectives would be sought in the course of the evaluation wherein the “School Governance Practices” would be assessed to determine their conformance to “Democratic Activities” that generate social capital.

#### **4.3.2.5 Data for the objects of the evaluation**

Categories of social media artefacts or components are sourced entirely from the second phase of the overarching study in which all of the known categories of social media were identified. These will be placed in the context of the school communities in order to serve as the objects of evaluation. The social media artefacts themselves and descriptions of them obtained from the providers of the services that offer them, provide the sources of data. Additional data is arrived at by subjectively assessing them in the context of a school community. The researcher's ontological perspective of school communities gained in phase one of the overall study, provides the basis for raising questions about the usage of the different categories of social media in a school community setting.

In qualitative research, data collection almost always involves the researcher's direct engagement in the setting studied, what often is called “fieldwork” (Kaplan & Maxwell, 2005). Therefore further data is sourced from the modelling of stakeholder roles and their interrelationships, the correlating of the two sets of data sourced for determining the evaluation objectives and the establishing of the context within which the categories of social media are to be evaluated.

### **4.3.3 The Evaluation Context**

The nature of critical interpretivism is reflected in the focus of the context of this evaluation. This context is established through the conclusions reached in the two preceding phases of the overall study. In the first phase, through a Foucauldian critical analysis in which the historical and societal context was established and the issues of power and control effecting the communities were considered (Doolin & MacLeod, 2005), it was determined that school communities may achieve transformation of the failing school education system in South Africa through the adoption of democratically functioning SGBs. The school communities are the detailed, local objects of critical evaluation that were assessed to provide an empirical interpretation of them (Doolin & MacLeod, 2005), that contributes to the context of this evaluation. Particular practices by SGBs were identified to meet specific transformational objectives. These transformational objectives represent the disruption to the status quo in the schooling scenario in South Africa (Doolin & MacLeod, 2005). In the second phase, the functional capabilities of selected social media artefacts were assessed in order to determine their capacity to enable the practices required by SGBs. It was found that an effective solution for the functional needs of SGBs was not available from any of the four social media artefacts evaluated and that a purpose designed artefact would be required. This is the context in which this phase of the study takes place and sets the scene for achieving the objective of this design-led evaluation.

### **4.3.4 The stage of the IS development**

Given that this is a design-led evaluation, this study is categorized as an early stage in the system development life-cycle and is therefore focused upon feasibility assessment (Walsham, 1999). Whether one envisages a “waterfall” systems development process (Royce, 1970) with the emphasis on complete problem analysis and design before proceeding to next development stage or an “agile development” process where the process relies on a flexible reiteration of development as new requirements are recognised (Manifesto for Agile Software Development, 2001), the value of a comprehensive problem definition to guide design serves to remove uncertainty and provide direction to future actions. Barki et al, (1993) express the risk associated with software development as;

$$\text{Software development risk} = (\text{project uncertainty}) * (\text{magnitude of potential loss due to project failure})$$

The removal of uncertainty reduces risks and motivates approval for development. Assessments of

existing social media artefacts establishes the extent to which the design of a conceptual IS may rely on new innovations of artefacts rather than the redeployment of existing artefacts. In this study, the stage of the IS development may be viewed from two perspectives. From the perspective of various social media-based artefacts which could serve as functional components in a final solution, it is post their development and thus the focus is on their redeployment. Nevertheless, the goals of the evaluation expressed in terms of specific practices, dictate the measure of the extents to which the evaluated technologies are feasible. Where shortcomings are identified, the conception of a new artefact which may include both existing components in the social media realm as well as newly-conceived-of or modified system components, would be the result. The overall perspective is therefore one of an early-stage development where the evaluation is a deductive feasibility assessment of existing social-media based components (Walsham, 1999) as well as a dialectic analysis of expressed goals where the evaluated components do not meet the requirements, leading to the innovation of new designs for artefacts. The purpose of the evaluation therefore is to achieve a description of a conceptual IS to meet the goals of the evaluation and provide direction for a future system design process.

#### **4.3.5 Hypothesising a Model of the Evaluation Object and Identifying the Stakeholders**

The recommended practices of SGBs to be facilitated through social media, presupposes the presence of certain macro-level stakeholders in an enabling environment that may provide either the means or utility to perform them. These macro level (state regulated level) stakeholders exist at an enabling infrastructural and administrative level, such as the telecommunications companies, state regulators and public sector utility services. For purposes of this study, this macro level enabling environment is presumed to be already established and adequate for the deployment of any social media activity and is therefore beyond the scope of this phase of the study. The stakeholders which are the focus of this evaluation are those which directly partake in the performance of the practices to achieve specific goals. The goals of this evaluation are derived from the organisational context of schools within the education system. This means that they are situationally applicable (Cronholm & Goldkuhl, 2003).

##### **4.3.5.1 The “Networked Social Services Media Model”**

The creation of a model of the evaluation object (Lagsten & Goldkuhl, 2008) will be utilised to illustrate an hypothesis of a structure representing the phenomenon of a virtual community formed

through affiliation to a common social service interest. This model represents the situational and contextual framework within which the overall research question is addressed. The model is constructed in two steps as a means of overcoming the contextual problems presented by the absence of an actual virtual community on which the model may be based. The first step therefore involves the creation of a generic model aimed at representing the generalised context of a community within which a networked social service media artefact may function. This model aims to represent a typical organisational context of a virtual community that has a focus of affiliation that is a public service delivered by the state. In the second step, the school community scenario is imposed onto the generic model and the stakeholder interactions with and through a networked social service media artefact, are depicted, thereby creating a theoretical construct of the object of the evaluation.

#### **4.3.5.1.1 The Generic Social Service Media Model**

The model of the generic situation attempts to represent the social contract (Rousseau, 1762) that defines the relationship between society and state, expressed in Foucauldian terminology. Its design reflects a high-level view of the paths through which various stakeholders may connect, communicate and collaborate through a suitably functioning social media artefact. This model of the generic public service provision is dubbed the “Social Services Media Model” and is designed to illustrate the organisational context of a generalised or generic public service situation. The concept of a “public service” is derived from the modern social contract-based relationship between society and state that was articulated by Rousseau (1762) as well as the many variations and derivations of the concept by subsequent philosophers on the subject. Ancient forms of social contracts are also enshrined in many old texts, including the Bible (NIV, 1973) where they are referred to as “covenants” (Genesis 12 – 17), (Exodus 19-24), (2 Samuel 7), (Hebrews 8:6-13). Fundamentally, in the modern form (since the formation of nation-states), a social service arises from an agreement whereby ordinary citizens forego their “natural” rights to certain freedoms in favour of their support for the state, in exchange for the state mobilising its resources to provide services to the benefit of society in general and, in some societies, the disadvantaged in particular. The terms of the social contract are expressed in documents such as the constitutions of countries, as is the case in South Africa, and it is given effect through the laws and legislation passed by the state to govern its citizens. Some philosophers view this relationship as one of conflict (Foucault, 1982) whilst others (Rousseau, 1762) as a situation of benign agreement. The state deploys its

resources in providing social services in the form of “public services”. Social services may also be provided by non-governmental organisations but in those situations, they are not referred to as public services.

This generic model attempts to convey a structure representing the typical public service situation where the *macro-structure of the state* (Foucault, 1980), (Dean<sup>2</sup>, 1994), meets a *social service obligation*, to a *community micro-structure* (Foucault, 1980), (Dean<sup>2</sup>, 1994), through a *social service organisation*, with a specific *social focus*. Social service obligations, delivered through social service organisations with specific social focuses are the result of the “codification of power relationships” between the macro-structures of the state and the micro-structures of society (Foucault, 1980), (Dean<sup>2</sup>, 1994). The term “codification” identifies the state with law, the juridical instance and juridical discourse.

“Strategies are employed to render society and its various “micro-structures” amenable to government and administration, to render it governable and administrable” (Dean<sup>2</sup>, 1994).

The “Social Services Media Model” illustrated below, is derived through a process of deductive reasoning and analysis, of the roles of the South African state and society (although it may be equally applicable to other countries) in the provision and consumption of public services as defined in the SA Constitution (1996) and the Public Service Act (1994). The researcher undertakes this interpretive analysis by assuming the roles of facilitator of reflection, learner, teacher, reality shaper and change agent (Lagsten & Goldkuhl, 2008). The model is based upon the researcher's interpretation of the relationship between the state and society in the provision of public services. The channels of communication featured in the model are technically based on Internet connectivity and are rationalised as being necessary firstly by the need to provide for community involvement through a knowledge sharing and collaboration platform that enables democratic activity (Hacker & Van Dijk, 2000), (Tiwani & Bush, 2001) and secondly, by the established positive correlation between effective public service media and democracy (Curran et al, 2009). The stakeholders and communication channels depicted in the model are;

The “Social Service Macro-structure”, representing a functionary of the state defined in terms of the SA Constitution (1996) and the Public Service Act, 1994, wherein powers are granted to national and provincial structures in order to provide specific public services, in conjunction with the state. These structures would be responsible for the management of state resources in execution of the delivery of a social service for a specific Social Focus.

The “Community Micro-structure”, representing that section of society that forms communities on the basis of being consumers of and therefore having an affiliation to, a particular public or social service. The Community Micro-structure may encompass the members of both the Social Service Organisation and the Social Focus.

The “Social Service Organisation”, representing a structured organisation instituted to deliver the social service on behalf of the state to the affiliated community under the terms of the Public Service Act, 1994 (PSA).

The “Social Focus”, representing those members of a community who are the objects of motivation for community affiliation and state service.

The “Social Services & Media Platform”, representing a yet to be conceptualised service comprised of an organisation and infrastructure designed to facilitate democratic participation as a utilitarian service, not as a stakeholder. It could conceivably deliver computer-mediated communications and collaboration, including the means of opinion formation between the stakeholders and the provision of repositories of media and transaction data provided for the stakeholders. As a mediator of the discourse between stakeholders, it could apply networking rules and privacy rules and thereby it would also be an integral participant in the processes but not as a stakeholder in the social service.

The Internet-based communication channels between the various stakeholders which depict how the stakeholders are interrelated, are denoted with numbers;

“Channel 1” illustrates a two way connection between the state as the “The Social Service Macro-structure” (SSM) and the “Social Service Organisation” (SSO) in order for administration and imposition of policy upon the SSO by the SSM. This channel need not be conducted through network enabled “Social Services & Media Platform” (SSMP) although it conceivably could do so.

“Channel 2” illustrates a two way connection between the State and the SSMP. The State could provide policy and administration information for dissemination through the SSMP, to the other stakeholders as well as partake in the community discourse, whilst the SSMP could provide relevant statistical data accumulated through the service, to the SSM.

“Channel 3” illustrates a two way connection between SSO and the other stakeholders through the SSMP. This channel would facilitate the administration functions of the SSO and



foster stakeholder engagement.

“Channel 4” illustrates a two way connection between “The Social Focus” which resides within the ambit of the SSO, and the other stakeholders via the SSMP.

“Channel 5” illustrates a two way connection between “The Community Micro-structure”, within whose ambit both The Social Focus and the SSO reside, and the other stakeholders via the SSMP.

## SOCIAL SERVICES MEDIA MODEL

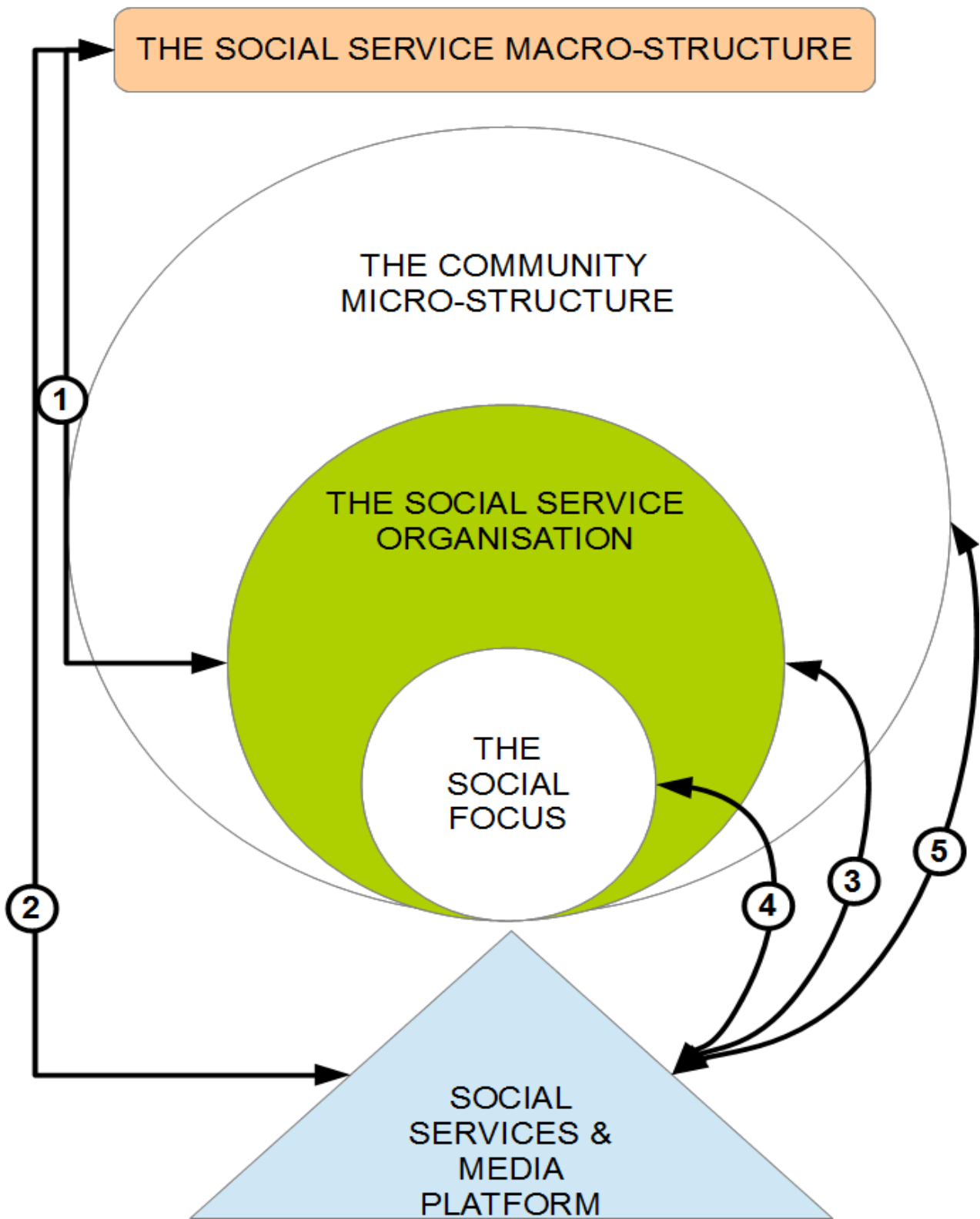


Figure 4

#### **4.3.5.1.2 The School-specific Social Service Media Model**

Adapting the Social Services Media Model to the schooling situation serves to test the scope of the model and its applicability to a specific social service situation. The stakeholders are the broader school community who are represented in the adapted model as role-player groupings in addition to the SSMP and the organisations representing the state (SSM). The South African Schools Act (1996) defines the institution of “schools”, the roles of “educators”, “learners” and “school governing bodies”. Extensive research into school communities and their relationship with effective schools, inform the construct of “the school parent body”. These role-players are defined as;

**The state and its agent institutions** such as the South African Department of Basic Education and the various provincial departments of education (PSA, 1994).

**The school** as an administrative entity which is the centre of focus of the other role-players and gains its status from being the institution formed to perform the tasks of education and is a structure that is an extension of the state authority which legislates over it (SASA, 1996).

**The educators**, responsible for meeting the responsibilities of their positions and status as educators of the learners. They could also serve administrative roles and thereby be part of the administrative entity that is the School (PSA, 1994 & SASA, 1996).

**The learners** whose effective education and well-being is the purpose of the school and whose obligations include attendance and participation.

**The school parent body** comprised of the community members who have an affiliation with the school primarily due to their children being learners in the school but may also include trusted supporters from the community who have other roles, such as past-pupils.

**The school governing body** comprised of members of the school parent body, the school principal, elected educators and learners which undertake the roles of governance and oversight as representatives of the school community as a whole (SASA, 1996). The overlapping of roles for some stakeholders is evident with the dual roles played by members of the school governing bodies.

In this adaptation of the model for the social service of schooling, the channels would perform as follows;

**Channel 1** represents the channel of administration communications between the state authority and the schools they administer. It is conceivable that these communications could

be facilitated through the SSMP but would probably require significant adjustments in established bureaucratic procedures for this to happen.

**Channel 2** represents a communication channel for the dissemination of legislative, policy and administrative information issued by the state for consumption by the community and the distribution of statistical usage data accumulated by the SSMP, for the state.

**Channel 3** represents a communication and collaboration channel between the school and other community-based stakeholders.

**Channel 4** represents a private communication channel between learners and other community-based stakeholders.

**Channel 5** represents a communication and collaboration channel between the members of the school community to facilitate opinion and organisation formation supported by the means to conduct community-wide open discourses on any given topic.

This adaptation, referred to as the “Networked Social Service Media Model” representing the situation of schooling in South Africa, is illustrated below and shows how the various role-players are accommodated within the stakeholder groupings of the model. The validity of the model will be further tested during the evaluation stage of this research by assessing whether the proposed structure accommodates the functions that define the role-players and enable participative democratic practices.

## NETWORKED SOCIAL SERVICES MEDIA MODEL

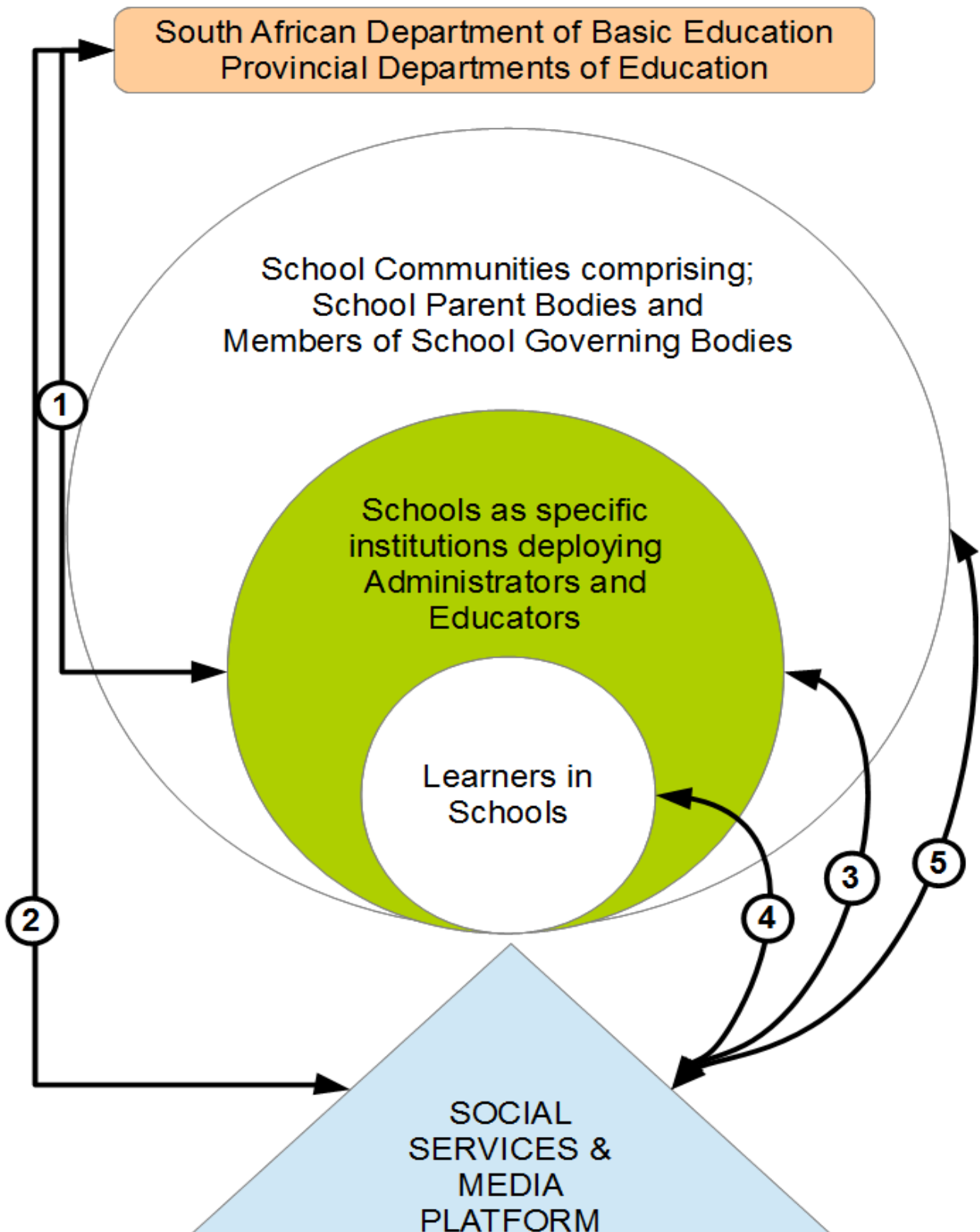


Figure 5

### 4.3.6 Validating the Goals of the Evaluation

The purpose behind validating the goals of the evaluation is to ensure that the goals support the value position of participative democracy which underpins this critical interpretive evaluation. Social betterment is the underlying reason for all evaluation research (Lagsten & Goldkuhl, 2008). Foucault defines this social betterment as transformation for social emancipation (Myers & Klein, 2011). In this study, the desired social betterment is clearly stated in the research question as the need to generate the social capital benefits for school communities. Social capital benefits are derived from, amongst other factors, activities that promote participative democracy within communities (Pasek, More & Romer, 2008). These “Democratic Activities” are identified as;

- Information provision / Access to information
- Preference measurement / Referenda, polls and representation
- Deliberation / Opinion formation
- Will formation / Organisation formation

(Tambini, 1999).

The means to achieving the objectives of social betterment through the attainment of transformational objectives, were identified through the critical analysis of schooling and school communities in South Africa, performed in phase one of the overarching study. The phase one study drew conclusions with regard to the underlying causes for the state of continual failure to deliver in the school education system and the means to effect transformation of the system through community participation. The underlying causes lay with an ideological conflict within the ruling ANC Tripartite Alliance, resulting in legislative contradictions which undermine the performance of schools but are nevertheless consistently imposed through the powers wielded by the state. The phase one study also concluded that particular practices of SGBs (School Governance Practices) could potentially reverse the situation through meeting identified objectives for transformation in the schooling system. Those “School Governance Practices” and their component “Actions” are;

- 1) SGB establishment and running practices;
  - a) Establishment of focused channels for disseminating information for educating and informing the community about the purposes of SGBs.
  - b) Democratic election of SGB representatives.
  - c) Adoption of appropriate SGB constitutions to govern their practice.
  - d) Creation of information repositories about the roles and activities of SGB members.

- e) Utilisation of accessible channels to promote community discourse, opinion formation and consensus seeking that mobilise communities to embrace and implement school governance.
- 2) SGB member training
    - a) Provision of information resources for training of parents and learners in SGB practices.
    - b) Facilitation of training for teachers, parents and learners in SGB functions.
    - c) Facilitation of gender equity education to SGBs and the wider school community
  - 3) Access to information and community discourse on legislation.
    - a) Inform communities about their rights of access to schooling for their children.
    - b) Inform communities about their rights to participate in the appointment and dismissal of teachers, funding of teacher's salaries and in service training.
    - c) Inform communities about their rights to address learner discipline issues and to determine suitable language policies.
    - d) Inform communities about their rights relating to SGB control of school property and finances.
  - 4) Monitoring and dissemination of information for control.
    - a) Empower communities to address teacher and learner absenteeism through SGBs.
    - b) Provide channels for SGBs to communicate their concerns and needs to the relevant state authorities.
    - c) Establish channels to generate social awareness about government policy and their effects on schools.
  - 5) Communication and collaboration through;
    - a) Establishment of channels and structures for collaborative activities between role-players in communities and school structures.
    - b) Facilitation of community networks to collaborate in support of teachers and teaching.
    - c) Establish channels to create social cohesion in school communities in the support of good teachers and extending teacher training.
    - d) Create social cohesion in school communities in the support of school attendance.
    - e) The adoption of telecommunications services to;
      - o Ease difficulty of SGB meeting attendance through the use of digital communications.

- Alleviate some of the inhibiting effects of HIV/AIDS and poverty through facilitating convenient collaboration practices within the communities.
- Enable transparent governance processes and prevent threats or deeds of victimisation of any members of SGBs

A reflexive and dialectic analysis, which underpins all other components of critical research methodology (Cecez-Kecmanovic, 2005), is performed to determine the extent to which the “School Governance Practices” are consistent with “Democratic Activities” and are therefore qualified to be the goals of the evaluation.

This analysis is performed by matching each of the “School Governance Practices” and deductively assessing whether the practice conforms to the activities known to promote participative democracy. In the event that a School Governance Practice is assessed to conform to a “Democratic Activity”, the “Actions” pertaining to each School Governance Practices are dialectically and reflexively assessed to determine which of the stakeholders are likely to perform them. If it is reasoned that the School Governance Practices conform to Democratic Activities and would be performed by the stakeholders of the evaluation, they are considered to be meeting the social capital objective of this evaluation. Table 13; the “Democratic School Governance Practices by Stakeholder Analysis”, represents the outcomes of this validation process. In the table the Actions are modified to represent the context applicable to the relevant stakeholders and the requirements of democratic practices in accordance with each stakeholder's role. The following example illustrates the method used;

In analysing the School Governance Practice which is expressed as,

**“SGB establishment and running practices”**

The SSM Platform stakeholder's Action is:

*“Establishment of a secure and private channel for conducting referenda, elections and community discourse.”*

The School stakeholder's Action is:

*“Impartial administration of processes for democratic election of SGB representatives.”*

Whilst the Educators, Parents and Learners stakeholder's Actions are all:

*“Participate in democratic election of SGB representatives.”*

Qualifying the description of the stakeholder Actions with attitudes that reflect qualities that



promote social trust in the Actions to facilitate participative democracy, such as “secure and private” and “impartial”, provide a nuance of the reliability that an enabling social media artefact would need to convey to society. Trust in the service that carries social media (Meraz, 2009), promotes democratic participation that further aligns the Actions with the social capital objectives. This analysis serves to substantiate the School Governance Practices as the objectives of the goals of the conceptual IS. Functions of the SSM Platform that facilitate the Actions of the stakeholders to achieve School Governance Practices would therefore be the valid goals for the conceptual IS. The goals of the conceptual IS therefore, are defined in terms of their capacity to achieve the goals of the evaluation.

### 4.3.7 The Objects of Evaluation

The focus of the evaluation is on IT-systems, determining the extent to which specific goals can be achieved through them (Cronholm & Goldkuhl, 2003). The underlying reasons for the evaluation are expressed in terms of goals which are of a more social or human character. Correspondingly, the assessments of these types of goals are expressed in qualitative terms. A qualitative assessment is therefore required of the conceptual IT system's capacity to meet these goals. The evaluation is consequently focused on assessing the feasibility of various social media technologies which may form component parts of a conceptual IS to enable practices that drive participative democracy in school communities. The focus encompasses the following categories of social media artefacts identified in phase two, set in the context of school communities and SGBs;

**Social networks**, which are sites that allow people to build personal web pages and then connect with Friends to share content and communication. The outcomes from the evaluation of SNSs in phase two indicate that the adaptation of existing models of SNSs for the needs of school communities do not provide suitable solutions. The evaluation would therefore focus upon the underlying concepts of SNS in the school community context.

**Blogs**, which are online journals (web logs), with entries appearing with the most recent entry first. Their application in a school community setting, is as a tool for tracking the progress of any stakeholder's comments on any relevant topic of interest, such as a school improvement project, a sporting team, a grade, etc. It provides a longitudinal perspective on relevant topics.

**Wikis** which are websites that allow people to add content to or edit the information on them, acting as a communal document or database. The creation of readily accessible repositories of critical community information such as legislation effecting their rights and the constitution of SGBs, for example.

**Podcasts** which are digital audio or video files that are episodic, downloadable, program-driven, mainly with a host and/or theme and are usually disseminated via an automated computerised feed. Ideally they could be utilised for providing education material for SGB members to create properly functioning SGBs through effective stakeholder participation.

**Forums** which are areas for online discussion, often around specific topics and interests. These would be vital to effective democratic participation as a means for promoting the community discourse, opinion formation and possibly referenda.

**Content communities or UGC** are communities which organise and share particular kinds

of content, usually photos, videos and bookmarked links. These include citizen journalist articles where citizens become pseudo journalists by sending articles and other content to main-stream media. The sharing of stories and images about the school amongst community members could strengthen feelings of affiliation to the school and engender community cohesion.

**Microblogs** which are social networking combined with bite-sized blogging, where small amounts of content ('updates') are distributed online and through the mobile phone network. The major advantage of microblogs in the school community context is the ability to facilitate a discourse through all kinds of mobile devices. This ability would be vital for delivering the service to the more deprived socio-economic environments where older technologies may persist.

### 4.3.8 The Evaluation Strategy & Evaluator's Role

As was the case in the previous phase of the overarching research, the evaluation strategy matrix devised by Cronholm & Goldkuhl (2003) is applied to determine an appropriate evaluation strategy. The matrix comprises 3 “how strategies” and 2 “what strategies”, providing a choice of 6 possible strategies determined by the approach being adopted to the evaluation and what is being evaluated. The three types of “how strategies” are described as;

Goal-based evaluation

Goal-free evaluation

Criteria-based evaluation

The differentiation is made in relation to what drives the evaluation.

Goal-based evaluation means that explicit goals from an organisational context drive the evaluation and these goals are used to measure the IT system. In this kind of study, the evaluation would adopt a qualitative strategy.

“The differences between a quantitative and qualitative strategy is that the quantitative strategy aims to decide if the goals are fulfilled and which goals that are fulfilled. The fulfilment of the goals will be expressed in quantitative numbers. There are also goals of more social or human character. The fulfilment of these types of goals is preferably expressed in qualitative terms. The qualitative process has also, besides the “if” and “which” questions, a better possibility to describe how the goals are fulfilled. This means that the qualitative approach aims at achieving richer descriptions” (Cronholm & Goldkhul, 2003).

The basic strategy of this approach is to measure if predefined goals are fulfilled or not; to what extent and in what ways. The approach is primarily deductive.

Goal-free evaluation means that no such explicit goals are used. Therefore goal-free evaluation is an inductive and context-driven strategy.

Criteria-based evaluation means that some explicit general criteria are used as an evaluation yardstick.

The two types of “what strategies” are;

IT-system as such

IT-system in use

IT-systems as such means evaluating the IT-system without the involvement from users and there are only the evaluator and the IT-system involved. The data sources that could be used for this strategy is the IT-system itself and possible documentation of the IT-system.

IT-systems in use means to study a usage situation where the user interacts with an IT-system. This analysis situation is more complex than the situation with “IT-systems as such” since it also includes a user. Data sources for this evaluation could be interviews of the users and their perceptions and understanding of the IT-system’s quality, observations of users interacting with IT systems, the IT-system itself and the possible documentation of the IT-system (Cronholm & Goldkuhl, 2003).

Applying the strategy evaluation matrix to the topic and approach of this phase of research yielded the following result;

“How strategy”

The research question clearly defines this as a “goal-based evaluation” strategy. The explicit goal is a conceptual design of a social media artefact to generate social capital for school communities. The question states a goal from an organisational context thus meeting the qualifying criteria. It cannot be a goal-free evaluation because the objective stated in the research question defines the goal. Similarly, it cannot be a criteria based evaluation because no criteria are mentioned in the research objective.

“What strategy”

The evaluation involves the researcher and the IT-system only and is therefore an evaluation of an “IT-system as such”. Even though the social-media functions or categories being evaluated may be in use as components in other SNS artefacts, the specific combination and variations of technologies in the form of a specific “social media artefact for school communities” is not being evaluated and therefore an “IT-system in use” situation cannot be evaluated.

The research strategy is therefore defined as a “goal-based evaluation of an IT-system as such”.

The evaluator's role in a goal-based evaluation of an IT-system as such is to measure if predefined goals are fulfilled or not; to what extent and in what ways. The approach is deductive but also dialectic and reflexive in order to address the critical aspects of the evaluation.

#### **4.4 The Goal-based Evaluation**

The ultimate outcome of this evaluation, is a description of the design of a conceptual IS that functions to generate social capital derived from democratic practices in school communities and SGBs. This is achieved by applying deductive logic and dialectic process to assess the networked social service media model in which the relevant stakeholders, connected by channels of communication and collaboration, create an organisational context suitable for performing a situationally applicable evaluation (Cronholm & Goldkuhl, 2003) of the feasibility of the different categories of social media to meet the goals of enabling democratically functioning SGBs and school communities. This assessment is performed by validating the practices of stakeholders, establishing the goals of the conceptual IS, validating the organisational context represented in the “networked social service media” model and finally evaluating the suitability and capacity of each of the social media technologies (the Objects of Evaluation) for inclusion in a conceptual IS designed to meet the evaluation goals.

The evaluation process followed takes cognisance of the dynamic nature of the relationships between communities which are defined by social objectives but which are in turn defined by the changing circumstances of the communities as their members adopt the roles of stakeholders and role-players performing actions to achieve their social objectives. As a community's perception of its social objectives change, so would the motivations and attitudes of relevant stakeholders in the community change accordingly. These changes would in turn effect the actions performed by the role-players from within the stakeholders. Identifying actions and their relevance to the community, drives the functions that would be sought from an effective social media platform. It is these functions and the capacity to provide them, that fulfil the goals of the conceptual IS and provide the outcome of this evaluation.

During the process of establishing the goals of a conceptual IS, the researcher needs to consider the influence of the dynamic nature of the interrelationships between the component parts of the social structure. The “Dynamic Social Media Platform Diagram” serves to illustrate these interrelationships and the dynamic nature of a virtual community scenario.

The Dynamic Social Media Platform Diagram

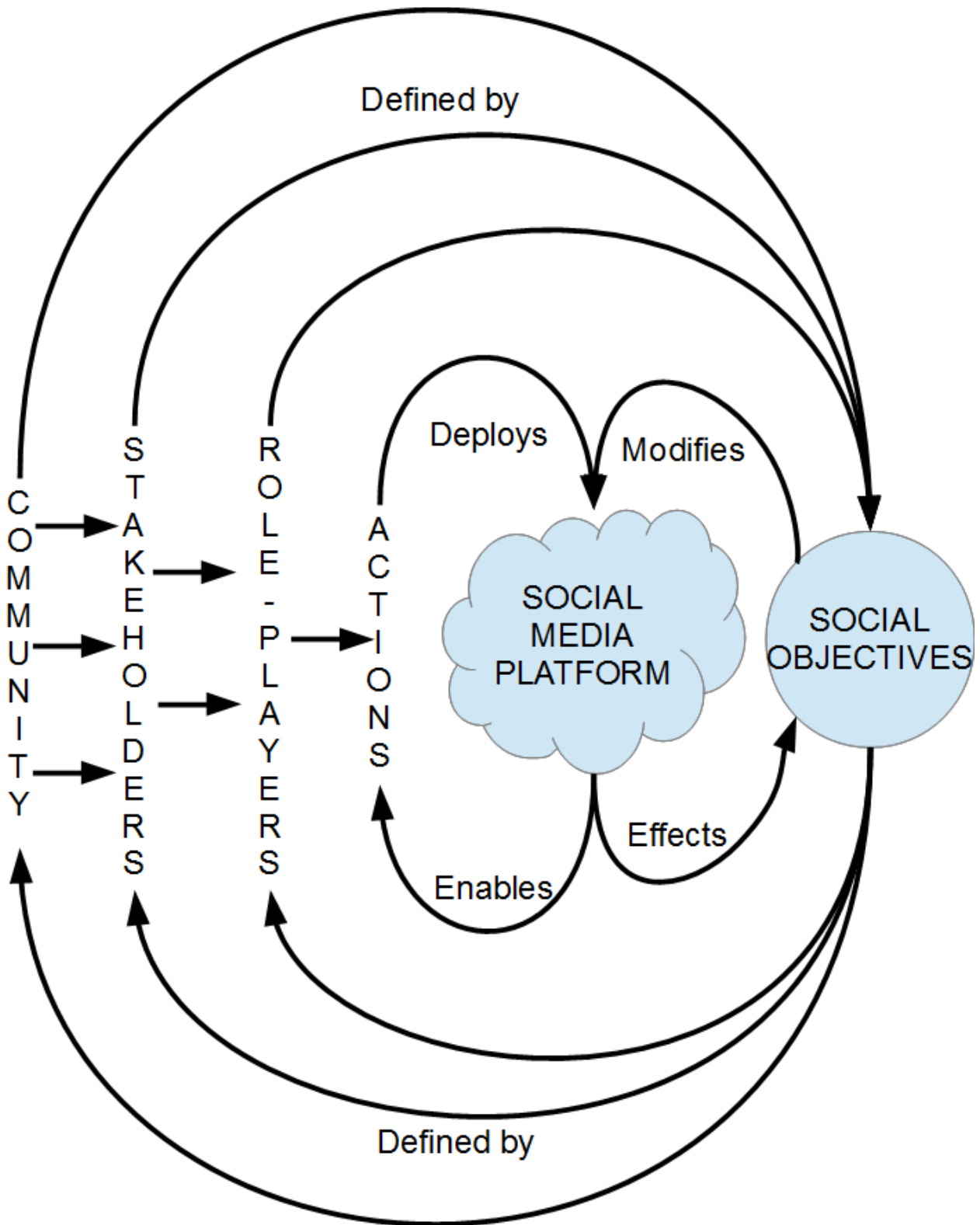


Figure 6

#### 4.4.1 Validating the Functions per Stakeholder

This validation is performed by extracting each of the actions per stakeholder from the “Democratic School Governance by Stakeholder Analysis” (See Table 12) and deductively extrapolating a concise set of “Functions per Stakeholder”. These Functions per Stakeholder are then allocated to specific roles and the roles are fully defined by aligning the functions with qualifying factors that foster democratic participation through establishing trust, such as transparency and integrity. The process of determining the functions per stakeholder are detailed in Appendix B in which the the actions per stakeholder are dialectically analysed and aggregated to produce the following list;

##### Schools

Performing administration services and mediation tasks between stakeholders to;

- Facilitate discussions, elections and referenda regarding SGB topics.
- Facilitate discourse with the school community w.r.t. SGB matters.
- Post information about SGB activities on community accessible media.
- Administration of access control and usage rules compliance.
- Collect school attendance data and distribute to community.
- Facilitate community support for teacher development.

##### Educators

Utilising Educator specific functions and services to;

- Participate in elections and referenda.
- Gather and disseminate data about school functions and events.
- Engage in discourse with community members.
- Use services promoting social objectives and democratic participation.

##### Parents

Utilising social media to;

- Participate in elections and referenda.
- Engage in discourse, opinion formation and consensus seeking with community members.
- Effect social objectives and democratic school governance.

##### Learners

Utilising social media to;

- Participate in elections and referenda.



- Engage in discourse with community members.
- Effect social objectives and democratic school governance.

#### **4.4.2 Determining the Goals of the Conceptual IS**

The goals of the conceptual IS are established by determining what functions of an IS would enable the performance of School Governance Practices by the relevant stakeholders to generate social capital through facilitating democratic action. Whilst the Social Services Media Platform is not a stakeholder in the functioning of a school community, it is the facilitating IS that would enable the community to achieve democratic school governance. Using a similar analysis and aggregation process as that applied to the various stakeholders, the SSM Platform's functions in enabling the functions of the various stakeholders are determined as;

##### **SSM Platform**

Providing social media functions for;

- An accessible information repository for public information (Information about schooling, such as legislated rights, best practices and reference data. Accumulated statistical data. Site usage information, terms and conditions of usage and site obligations)
- Secure, SGB accessible repository for SGB specific information (such as SGB education material, school discipline issues, teacher performance and remuneration, school performance data and school to community communications)
- Secure and private two way communication channel between stakeholders (specifically for discourse about learners)
- Secure, community wide communication channel between stakeholders to conduct an open discourse, form opinions and seek consensus
- Secure and private facility for holding and determining referenda and elections
- A channel for accumulating statistical data on schools and communicating them to the community and the state.

These functions required of the SSM Platform are the goals of the conceptual IS.

### **4.4.3 Validating the Hypothesised Model**

Having established the goals of the conceptual IS, the hypothesis that is represented by the model is validated through the affirmation that the goals of the conceptual IS may be illustrated functionally in the model. An assessment is performed by imposing roles derived from the School Governance Practices onto the model, in order to determine whether the model reflects the roles of the stakeholders and provides the channels of communication between them to facilitate their School Governance Practices. By doing so, the model's representation of an organisational structure of the community that is suitable for the execution of activities that promote participative democracy in the governance of schools, is affirmed. The affirmation requires that each role is depicted in the model to illustrate each stakeholder's role perspective, along with their respective lines of communication in performing those roles. Once the stakeholder roles are affirmed, the specific functions of the SSM Platform (the Conceptual IS) may be extrapolated and tested by matching them to the goals of the conceptual IS.

#### **4.4.3.1 Deriving Functions of Role-players**

The task of allocating specific functions to the role-players is performed systematically as follows;

- The role-players are sorted into a processing sequence whereby the roles which contain the greatest number of stakeholders are dealt with first and then following a descending “stakeholders per role” sequence. The reason for this is to avoid the potential confusion of overlapping functions and to create a concise result.
- The functions of each stakeholder involved in a role will be allocated to that role and where possible, an aggregated description of the role, embellished with the qualities required of democratic activity, will be derived.

The School Governing Body is the first role-player in the sequence as it comprises the educators, parents, learners and the school principal representing management and administration. The Schools is the next role-player as it comprises two role-playing components in educators and administrators (including the principal). The Educators is a single stake-holder role-player, as are the Parents and the Learners. The State is a complex entity but functions purely as a single notion of authority in the context of the schooling structure.

Subsequently, the sequence of process is; School Governing Body

Schools

Educators

Parents

Learners

State

The relevant functions of stakeholders comprising a School Governing Body are;

Schools

- Facilitate the discourse, elections and referenda regarding SGB topics
- Post information regarding SGB activities on accessible media.
- Facilitate community support for teacher development

Educators, Parents and Learners

- Participate in elections and referenda
- Engage in discourse, opinion formation and consensus seeking with community members
- Utilise social media channels to effect social objectives and democratic school governance

The State does not have a direct participatory role in School Governing Bodies.

The roles of School Governing Bodies may therefore be described as;

“The sourcing and dissemination of relevant information, conducting topical discourse and holding elections and referenda with transparency, fairness and integrity to build community cohesion and trust.”

The relevant functions of stakeholders comprising Schools are;

Administrators

- Administer and control access, channel usage and privacy rules adherence
- Post information about SGB activities on community accessible media.

Educators

- Collect school attendance data and distribute to communities
- Gather and disseminate data about school functions and events

The roles of Educators and Administrators in Schools are therefore;

“Administrators: Diligent stakeholder administration and mediation. Punctual management

of data and processes.”

“Educators: Diligently and punctually source, generate and disseminate school functions and events data.”

The relevant functions of stakeholders comprising Educators, Parents and Learners are;

“Actively participate to effect social objectives and democratic school governance.”

#### **4.4.3.2 Affirmation of the Model Design**

The derived roles are imposed on the model in order to determine whether the model continues to provide a structural and organisational context for democratically functioning school communities. The Networked Social Service Media model is validated by dialectically and reflexively assessing whether it illustrates a valid representation of the organisational context of school communities and in turn serves to determine the functions of the Conceptual IS. The “Networked Social Service Media Model for Schooling” (below) depicts the various role-players and their respective roles in the structured virtual school community scenario. Qualitative factors that would ensure that effective school governance achieves its social objectives, are not depicted on the model but the necessity for their adoption may be implied from the wording of the stakeholder actions in the “Democratic School Governance by Stakeholder Analysis” (Table 12). As depicted below, the structure is able to accommodate all the roles and the channels of communications required to perform the tasks described. This serves to affirm the model design as an adequate conception of an organisational structure to represent a virtual community formed through a networked social services media platform and thereby proves the hypothesis posited in the design of the model.

## NETWORKED SOCIAL SERVICES MEDIA MODEL FOR SCHOOLING

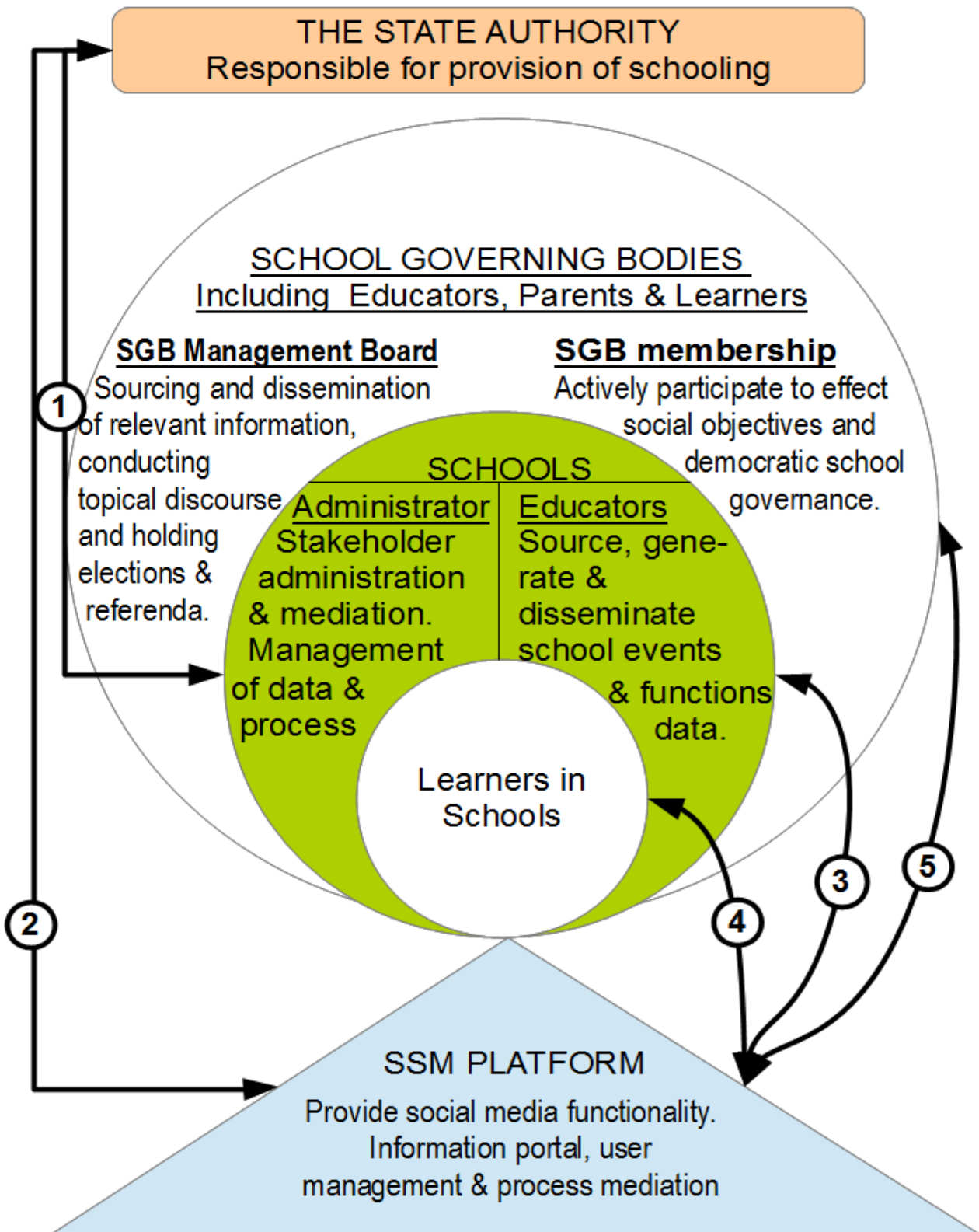


Figure 7  
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#### **4.4.4 Evaluating the Technologies (Objects of Evaluation)**

The focus now shifts to the Social Service Media Platform as the conceptual IS which has the goals of facilitating the actions of the various stakeholders in school communities pursuing democratic school governance.

The purpose of the evaluation therefore is to assess the capacity for each of the categories of social media technologies (the Objects of Evaluation) to meet the validated goals of the conceptual IS within the validated organisational context. The performance of each of the categories of social media are assessed against each of the goals of the conceptual IS in turn, in a repetitive cycle of interpretation of the data. The results are refined by going back to see if the results still make sense in view of the additional data provided by each subsequent result, in a deductive and dialectic process. Artefacts which are assessed to be effective would be incorporated in the conceptual design of a networked social service media system for school communities. The evaluation process entails the assessment of each of the categories of social media by pursuing the following process;

- Performing a deductive matching of the functioning of each category of social media to each of the functions required of the conceptual IS to enable the practices required by school communities.
- Where matches are found, assessing whether the technologies require modifications or enhancements through a dialectic process of responding to questions arising from their performance capacities from both the school community perspective as well as the participative democracy perspective. Key questions are posed for each perspective about every matched technology, as follows;
  - Determine school community application of the technologies in response to the following:
    - Where would the community access the technology?
    - How would the community access the technology?
    - What would the technology provide to the community?
  - Determine how the technology is to function in a manner that enhances democratic participation, in response to the following:
    - Does the technology provide the means for information provision and easy and free

access to that information (Tambini, 1999)?

- Does the technology provide the means for accurate and transparent preference measurement (Tambini, 1999) through referenda, and polls?
  - Does the technology provide the means for open discourse within the communities to enable fair processes of deliberation and opinion formation (Tambini, 1999)?
  - Does the technology provide the means for secure and transparent processes for will and organisation formation (Tambini, 1999) through elections?
  - Does the technology engender community trust (Pasek, More & Romer, 2008) through strict compliance with clear operating rules and protection of user privacy?
- Dialectically determining to what extent the evaluated technologies fall short of meeting the goals of the conceptual IS in order to describe changes and enhancements to the typical forms of those technologies.

Table 14 entitled “Analysis of Social Media Components for the Goals of the Conceptual IS”, reflects the outcomes of this evaluation process.



## **4.5 Conclusion – The Conceptual IS**

This study has determined that a “networked social service media” artefact that embodies the functions and design features described below, would promote participative democracy in school communities and thereby generate the social capital benefits that would motivate the artefact's adoption by school communities.

### **Supporting Structures**

Prior research indicates that educational and instructional interventions are necessary to overcome technology aversion factors that tend to inhibit individual's and organisation's participation in social media (Rheingold, 2008), (Burgess et al, 2006), (Kanter & Fine, 2010). In addition, the activities pursued in effecting participative democracy entail monitoring and mediation of processes to ensure validity and integrity. Therefore, deploying the conceptualised “networked social media service” artefact requires a fundamental deviation from the norms of other social media services inasmuch as the functioning of the service requires a supporting organisation to perform the following tasks associated with the service commitment;

Accumulation and updating of information provided through the service website, in order to provide locality relevant material for the community.

Monitoring and mediation of discourses exchanged through the service to ensure non-abuse.

Provide training and instruction to community members and school personnel to overcome issues of technology aversion and promote effective utilisation.

Monitoring and mediation of referenda and elections conducted through the service.

Generation of statistical data from accumulated data for dissemination to the state and the community.

### **Design Features**

Unique design features required by the service are;

Membership is automatically granted and rescinded in accordance with the affiliation rules imposed by the system which would entail that members have a relationship to a learner in the school and the school confirms the member's status.

Membership implies the joining of the network that comprises the entire community of a specific school. No activity of befriending is required.

Group affiliations are imposed in accordance with related learner activities as well as through voluntary association.

Functions are role specific in order to represent the functional realities of the schools and SGBs.

## **Service Functions**

The functions provided by the service would include;

An open website for accessing relevant school community information and secure member login.

A Member page for engaging in open community-wide discourse through forums and activity-based groups.

A Groups page for engaging in one-to-one correspondence with fellow members through an SNS-type messaging service.

A Surveys/Referenda/Elections page for partaking in surveys, referenda and elections that are promoted through the open forums to engender open discourse and informed opinion formation.

A system for generating alerts for events requiring urgent action.

## 5 Conclusions

The overarching research question for this study is; “What features would characterise an appropriately functioning, Internet enabled, social media-based artefact, designed to promote the democratic participation of communities in schools in South Africa?”

Inspired by the DSRM, this 3 phased research systematically addresses the questions arising from the failing schooling education system in South Africa and proposes the design of a conceptual IS to enable democratic community participation as a solution. A value proposition in support of democracy, demands critical research coupled with evaluation of ICTs to determine their capacity and feasibility to enable specific practices to achieve social needs. These findings inform the design of a conceptual solution of an “artifact created to address a problem” and is relevant to the solution of a “heretofore unsolved and important [business] problem” (Peppers et al.,2008). As such, the study reflects its inspiration from the DSRM.

In the first phase, the first step in the DSRM; described as “problem identification and motivation”, is addressed through the execution of a Foucauldian critical analysis, in response to the research question, “What are the underlying causes for the persisting problems in South African school education?” The study reveals that the underlying causes of the education problems are systemic within the state, brought about by the effects of ideological conflict within the ANC Tripartite Alliance. This conflict results in the formulation of contradictory policies, inspired either by communist or democratic ideological stances, that effectively negate each other in their practical application.

The second step of the DSRM; articulated as “define the objectives for a solution”, is pursued through further critical analysis in phase one, in response to the 2<sup>nd</sup> question; “How may democratic participation of communities in support of their schools, lead to transformation?” The answers culminate in a list of specific practices to be followed by school communities. These practices are;

- Establishment and running of SGBs
- Training of SGB members in order to foster participation
- Informing SGBs of their legislated rights to govern in order to prevent abuse and manipulation of SGBs
- Control through monitoring of functions and events and disseminating resulting information

- Communication and collaboration between school structures and communities

In the second phase of the study, a context-based evaluation of selected social media artefacts determines the extent to which the adoption of established social media artefacts are able to provide functions that enable participative democratic activities in support of school communities. This phase concurs with the “design and development” step of the DSRM in which the possibility of an instantiation of an established solution is investigated. The results indicate that whilst some technologies deployed by the social media artefacts could provide capacity for many of the necessary functions, a complete solution suitable for any social service-based community, including schooling communities, does not lie with any of the specifically selected, social media artefacts evaluated. This result motivates the pursuit of an innovative solution.

In the final phase, the “design and development step” of the DSRM is pursued further through an innovative design in response to the research question for the phase; “What functions and design features are required of a “networked social service media” artefact to generate the social capital benefits that would motivate school communities to adopt them?” Guided by the findings in the two preceding phases and the data from reviewed literature covering participative democracy, virtual communities, social media accessibility issues, social capital, and the enablement of social services; a conceptualised notion of a “networked social service media” artefact is hypothesised. A goal-based evaluation of a conceptual IS, employing a critical interpretivist epistemology, provides the response to the research question in the form of a conceptual solution design. It is determined that a “networked social service media” artefact that embodies functions and features conceptualised to address specific “School Governance Practices”, would promote participative democracy and would thereby generate the social capital benefits that motivates the artefact's adoption by school communities.

The overall conclusion is that an IS, in the form of an Internet enabled social media artefact, following the design features articulated for a “Networked Social Services Media” service, has the capacity to promote democratic participation by communities in schooling in South Africa.

### **5.1 Research Contributions**

The primary contribution of this work lies in the value of a potential solution to the desperate state of schooling education in South Africa, which has worsened progressively over a period of eighteen years and serves as the ultimate motivation for this study.

From the purely academic perspective, every phase in this study make contributions to the bodies of knowledge in either one or both of the fields of “Schooling in South Africa” and “Information Systems”.

Phase one contributes to the vast store of academic works covering every aspect of schooling education in South Africa. It provides a critical assessment of the effects that the political and educational philosophies have on South Africa's educational policies and identifies the root causes for the persistence of a failing system. The study provides an example of critical research into education in South Africa and provides a recommendation of a framework for conducting Foucauldian critical analysis.

The response to the second research question contributes to a deepening understanding of community participation in effective, democratic school governance and the potential to effect transformation of a failing system through the adoption of specific practices. An example of executing a critical analysis based on Foucault's “regimes of practice” is a by-product of the research.

Phase two contributes to the sparse body of knowledge on the topic of social media usage in South Africa. From a more global perspective, the research provides a contribution to the evaluation of social media artefacts. The study provides methodology in researching the use of social media within the sensitive realms of schooling and potentially vulnerable youth. It also provides an example of performing a “Context-based technology evaluation”.

The third phase of research makes a contribution to the knowledge of IS design. Specifically, it provides an approach to formulating a conceptual artefact design in the social media realm. The study provides an example of a framework for applying critical interpretivism in IS to conduct a design-led evaluation of technologies to meet specific social objectives. The research also contributes to the topic of the utilisation of social media for social service and contributes innovation in the conceptualisation of artefact design. The “Networked Social Services Media Model” and the “Dynamic Social Media Platform Model” provide models for assessing and evaluating social media for social services, in future research.

## **5.2 Future Research**

This study provides a sound basis, in the form of a conception of a design, for the development of a “Networked Social Service Media” artefact. In the event of a development based on the conceptual

design taking place, an opportunity opens up for proceeding with the latter steps promulgated by the DSRM.

The methodology developed to conduct Foucauldian critical research of potential virtual communities, could provide a feasible approach for studies into other communities and other solutions.

Similarly, the framework adopted for conducting critical interpretive research in IS could present an opportunity for further studies in IS that are underpinned by strong social values.

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## APPENDICES

### **Appendix A - Weighting Assessment of Social Media Evaluation Criteria**

- Can users create their own unique profiles?

In the context of serving school communities, it would be more important for the school to verify a user's profile than for a user to create their own profile. The integrity of the community as an entity would be compromised if users were allowed to be either inaccurate regarding their profile information or to have profiles that do not reflect their true identities. In a school community setting, the importance of individuals creating their own unique profiles would be as important as it is in other communities providing that the school has a pre-imposed right of validation.

Weighting Value = 1

- Are users able to articulate and make visible their social networks?

In a school community setting, the social network would, in effect, be imposed through an act of affiliation to the school. Any restriction on users from seeing the entire network for the school therefore would not make sense. Internet-based social media enable individuals to create more specialised, issue-specific communities and networks that transcend traditional geographic boundaries (Donner, 2005). Other, more granular groupings within the school community network may be necessary to reflect structures within a school, such as grades. The weighting accorded to this criterion is 1 as it would be equally important to school communities as it is to non-affiliation-based communities.

Weighting Value = 1

- Are users prompted to identify others in the system with whom they have a relationship through a bi-directional confirmation of Friendship?

The function of bi-directional confirmation would be between the individual and the school. The school is therefore the gatekeeper of the community in order to maintain the integrity of the community. This qualified admission implies that the bi-directional confirmation between Friends has no value.

Weighting Value = 0

- Can the user set or regulate/restrict, according to user discretion, the visibility of its profile?

The capacity for any individual to retain the privacy of profile details apart from their identities, within the community and to share information with other community members on a selective basis, is an important feature for protecting community harmony and individual choice. However, unrestricted identity visibility within groupings would be necessary for the effective functioning of the school community. Only non-identity specific profile details would therefore be subject to regulation by the user. Within the more restrictive context of school communities, this criterion would be as important as it is in open communities.

Weighting Value = 1

- Does the service enable the public display of connections/relationships?

Public display of connections/ relationships beyond the confines of the community would be undesirable for purposes of a school community. As such, this criterion would not be required.

Weighting Value = 0

- Does the service provide a mechanism for users to leave messages on their Friends' profiles?

In order to facilitate open discourse within the community, this would be a vitally necessary feature.

Weighting Value = 1.5

- Does the service have a private messaging feature similar to a web based email service?

In order to enable private discourse between members this would be desirable for community cohesion and convenience.

Weighting Value = 1.2

- Does the service provide a mechanism to restrict visibility to profile information and postings of school children?

The moral panics about pornography, illicit chats and unsupervised youths over social media are illustrative of technologies that are woven into the fabric of everyday life, not relegated to a narrow informational role (Gonner & Gitau, 2009).

Whilst restricted user registration would provide limitations to general public access, there is also a requirement for restriction on both profile information on and messages pertaining to school children. A mechanism of tight user control over who gains access to data about the profiles and postings of school children is desirable. This would be a vital feature for school communities.

Weighting Value = 2

- Does the service perform with functional equivalence on mobile phones and computers?

In South Africa, cost is a driver towards mobile Internet (Chigona et al, 2009) The poverty of communities in rural and township areas drives the high prevalence of mobile phone usage (Kreuzer, 2009). In addition, the inconsistent reach of the various telecommunications infrastructures (poor land-line reach but extensive mobile coverage) will result in the bulk of internet users in the developing world eventually being mobile centric, either as mobile-primary or mobile-only users (Donner& Gitau, 2009). Whilst in developing societies, users have to deal with the reality and perceptions of social exclusion (Chigona et al, 2009), social, expressive and entertainment functions on mobile Internet, draw people to the channel (Donner & Gitau, 2009). Therefore it is imperative that an SNS for school communities in South Africa functions fully on the mobile platforms.

Weighting Value = 2

## **Appendix B Stakeholder Activity Analysis**

### **1) SSM Platform**

- a) Establishment of focused channels for disseminating information for educating and informing the community about the purposes of SGBs.
- b) Establishment of a secure and private channel for conducting referenda and community discourse
- c) Establishment of a secure process for determining election results to reflect the will of the electorate.
- d) Provision of information resources for training of parents and learners in SGB practices
- e) Facilitation of gender equity education to SGBs and the wider school community
- f) Inform communities about and provide channels for discourse on;
  - i. their rights regarding access to schooling for their children.
  - ii. their rights regarding the appointment and dismissal of teachers, funding of teacher's salaries and in service training.
  - iii. their rights to address learner discipline issues and to determine suitable language policies.
  - iv. their rights regarding SGB control of school property and finances.
- g) Provide channels for the collection and dissemination of data about the functioning of the schools.
- h) Establish channels to generate social awareness about government policy and their effects on schools.
- i) Establishment of channels and structures for collaborative activities between role-players in communities and school structures.
- j) Establish channels to create social cohesion in school communities in the support of good teachers and extending teacher training.

Functions derived from the SSM Platform's Actions are;

- An accessible information repository for public information (such as legislated rights, best practices and reference data) – Refer to actions a, d,e, f and h.
- Secure SGB accessible repository for SGB specific information (such as SGB education material, school discipline issues, teacher performance and remuneration, school performance data and school to community communications) – Refer to Actions a, d, e, f)ii, f)iii & f)iv, g and j.
- Secure and private two way communication channel between stakeholders – Refer to Actions d, f, g and h (create social cohesion)
- Secure, community wide communication channel between stakeholders to conduct an open discourse. – Refer to all Actions.
- Secure and private facility for holding and determining referenda and elections. – Refer to Actions b & c

### **2) Schools**

- a) Impartial administration of processes for democratic election of SGB representatives
- b) Utilisation of accessible channels to promote community discourse and mobilise communities to embrace and implement school governance.

- c) Creation of information repositories about roles and activities of SGB members.
- d) Partake in training of teachers, parents and learners in SGB functions.
- e) Inform communities about;
  - i. their rights regarding access to schooling for their children.
  - ii. their rights regarding the appointment and dismissal of teachers, funding of teacher's salaries and in service training.
  - iii. their rights to address learner discipline issues and to determine suitable language policies.
  - iv. their rights regarding SGB control of school property and finances.
- f) Provide administration and control to ensure accurate dissemination of data and adherence to privacy rules.
- g) Create social cohesion in school communities in the support of school attendance.
- h) Facilitation of community networks to collaborate in support of teachers and teaching.

Functions derived from the Schools' Actions are;

- Facilitate discussions, elections and referenda regarding SGB topics. Refer to Action a
- Facilitate discourse with the school community w.r.t. SGBs. - Refer to Actions b, d and e
- Post information about SGB activities on community accessible media. - Refer to Action c
- Administration of access control and usage rules compliance. - Refer to Action f.
- Collect school attendance data and distribute to community – Refer to Action g
- Facilitate community support for teacher development – Refer to Action h

### **3) Educators**

- a) Participate in democratic election of SGB representatives
- b) Utilise accessible channels to promote community discourse and mobilise communities to embrace and implement school governance.
- c) Participate in the adoption of appropriate SGB constitutions to govern their practice
- d) Partake in training for teachers, parents and learners in SGB functions
- e) Engage in community deliberations about;
  - i. their rights regarding access to schooling for their children.
  - ii. their rights regarding the appointment and dismissal of teachers, funding of teacher's salaries and in service training.
  - iii. their rights to address learner discipline issues and to determine suitable language policies.
  - iv. their rights regarding SGB control of school property and finances.
- f) Utilise available channels to gather data and report on school functions and events.
- g) Participate in community discourse to generate social awareness about government policy and their effects on schools.
- h) Partake in community efforts to address teacher and learner absenteeism through SGBs
- i) Utilise social media-based service to;
  - i. hold SGB meetings through digital communications
  - ii. reduce the inhibiting effects of HIV/AIDS by enabling digital collaboration practices
  - iii. enable transparent governance practices and prevention of victimisation of any SGB members

Functions derived from Educators' Actions are;

- Participate in elections and referenda. - Refer to Actions a,b,c,f, h and I
- Gather and disseminate data about school functions and events

- Engage in discourse with community members – Refer to all Actions
- Utilise social media channels to effect social objectives and democratic school governance – Refer to all Actions

#### **4) Parents**

- Participate in democratic election of SGB representatives
- Utilise accessible channels to promote community discourse and mobilise communities to embrace and implement school governance.
- Participate in the adoption of appropriate SGB constitutions to govern their practice
- Partake in training for teachers, parents and learners in SGB functions
- Engage in community deliberations about;
  - their rights regarding access to schooling for their children.
  - their rights regarding the appointment and dismissal of teachers, funding of teacher's salaries and in service training.
  - their rights to address learner discipline issues and to determine suitable language policies.
  - their rights regarding SGB control of school property and finances.
- Utilise available channels to receive information about school functions and events.
- Participate in community discourse to generate social awareness about government policy and their effects on schools.
- Partake in community efforts to address teacher and learner absenteeism through SGBs.
- Utilise social media-based service to;
  - hold SGB meetings through digital communications
  - reduce the inhibiting effects of HIV/AIDS by enabling digital collaboration practices
  - enable transparent governance practices and prevention of victimisation of any SGB members

Functions derived from Parents' Actions are;

- Participate in elections and referenda. - Refer to Actions a,b,c,g and h
- Engage in discourse with community members – Refer to all Actions
- Utilise social media channels to effect social objectives and democratic participation. – Refer to all Actions

#### **5) Learners**

- Participate in democratic election of SGB representatives
- Utilise accessible channels to promote community discourse about school governance.
- Participate in the adoption of appropriate SGB constitutions to govern their practice
- Partake in training for teachers, parents and learners in SGB functions
- Engage in community deliberations about;
  - their rights regarding access to schooling for their children.
  - their rights to address learner discipline issues and to determine suitable language policies.
  - Participate in community discourse to generate social awareness about government policy and their effects on schools.
  - Partake in community efforts to address teacher and learner absenteeism through SGBs
- Utilise social media-based service to;
  - hold SGB meetings through digital communications
  - alleviate some of the inhibiting effects of HIV/AIDS by enabling digital collaboration



- practices
- iii. enable transparent governance practices and prevention of victimisation of any SGB members

Functions derived from Learners' Actions are;

- Participate in elections and referenda. - Refer to Actions a,b,c,g and h
- Engage in discourse with community members – Refer to all Actions
- Utilise social media channels to effect social objectives and democratic school governance – Refer to all Actions

**Table 6: Literature Analysis by Themes, Sub-themes & Sources**

<b><u>Themes</u></b>	<b><u>Sub-themes</u></b>	<b><u>Articles</u></b>
History	Early community, missionary and state schooling	Johnson (1982) [3], Nel & Binns (1999) [3],
	Apartheid education and its legacy	Nel & Binns (1999) [3], Dean (2000) [3], Kallaway (2002) [3]
	Post Apartheid education	Bhorat (2004) [3], Lam, Ardington & Leibbrandt (2008) [3], Ministerial Committee on Learner Retention in South African Schooling System, March (2008) [4], Top 100 Schools Survey (October, 2009) [4], Department of National Treasury (2011) [4], Atkinson (2007) [4], Mail & Guardian Online (2008) [5], Sunday Times (2009) [5], Bloch (2010) [5], The Witness (2011) [5]
Power	Primary Philosophical Text	Aristotle's "The Athenian Constitution" (Rackham, 1922) [1], The Communist Manifesto (Marx & Engels, 1848) [1]
	Secondary Philosophical Text	Broad (1930) [1], Dewey (1937) [1], Anscombe (1958) [1]
	Political Doctrine	ANC (1994) [1], ANC* (2011) [1], National Democratic Revolution (NDR) [1]
	Legislation	National Qualifications Framework (NQF) [2], South African Qualifications Authority (SAQA) Act, No. 58 of 1995 [2], Labour Relations Act, 66 of 1995 [2], National Education Policy Act, 27 of 1996 [2], South African Schools Act, 84 of 1996 [2], Employment of Educators Act, 76 of 1998 [2]
	Curriculum 2005	Chisholm (2004) [3], Harley & Wedekind (2004) [3]
	Revised National Curriculum	Chisholm (2004) [3], Harley &

	Statement	Wedekind (2004) [3]
	Contention between Democracy and Communism	Slovo (1987) [1], ANC* (2011) [1], Taborsky (1967) [3], Christie (1996) [3], Harley & Wedekind (2004) [3], Chisholm (2004) [3],
	Impact of Policies on Education	Nel & Binns (1999) [3], Therkildsen (2001) [3], Chisholm (2004) [3], Govender (2004) [3], Muller (2004) [3], Allais (2007) [3], Visser (2007) [3], Van Wyk (2007) [3], Department of Labour, Republic of South Africa (2006) [4], Christie et al (2007) [4]
Transformation	Democratic School Governance	South African Schools Act (1996) [2], Sammons, Hillman & Mortimer (1995) [3], Nel & Binns (1999) [3], Sheldon & Epstein (2002) [3], Wohlsetter et al (2003) [3], Lewis & Motala (2004) [3], Lewis & Naidoo (2004) [3], Mncube (2008) [3], Mncube (2009) [3], Smit & Oosthuizen (2011) [3]
	Policy Impact Assessment for Transformation	National Democratic Revolution (NDR) (ANC*, 2011) [1], Universal Declaration on Democracy 1997 [1], Slovo (1988) [1], Labour Relations Act, 66 of 1995 and various Amendments (LRA) [2], National Education Policy Act, 27 of 1996 (NEPA) [2], South African Schools Act, 84 of 1996 (SASA) [2], School Governing Bodies (Policy contained within SASA) [2], Curriculum 2005 (C2005) [2], Revised National Curriculum Statement (RNCS) [2], National Qualifications Framework, 67 of 2008 (NQF) [2], Taborsky (1967) [3], Christie (1996) [3], Nel & Binn (1999) [3], Anderson, Case & Lam (2001) [3], Sheldon &

		Epstein (2002) [3], Perry & Arends (2003) [3], Harley & Wedekind (2004) [3], Muller (2004) [3], (Lewis & Motala (2004) [3], Van Wyk, (2007) [3], Visser (2007) [3], Lam, Ardington & Leibbrandt (2008) [3], Smit & Oosthuizen (2011) [3], (Department of Labour, Republic of South Africa (2006) [4], UNESCO, Institute for Statistics [4], Department of Education (2004) [4], Hoffman (2010) [5], Metcalfe (2010) [5]
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**Table 7: Impact Analysis of Political Power Structures and Policies on Schooling in South Africa**

<b><u>Imposing Political Power</u></b> <b>ANC Tripartite Alliance</b>	<b><u>Policies</u></b>	<b><u>Contention between Democracy and Communism</u></b>	<b><u>Impact of Policies on Education</u></b>
	<p>National Qualifications Framework (NQF) implemented under the South African Qualifications Authority (SAQA) Act, No. 58 of 1995</p> <p>Labour Relations Act, 66 of 1995 and various Amendments (LRA)</p>	<p>This policy, formulated by internal alliance structures from which the general public and society were excluded, prior to democratic elections in 1994 (Christie, 1996). By implication, ratified through democratic elections where the ANC has majority appeal as the “liberation movement”. Situated within the ANC branded alliance, SACP and COSATU subsume their political power without having to face the scrutiny that democratic election imposes (ANC, 2011). Lacking public participation in the formulation processes implies an undemocratic process and therefore the lowest level of participative democracy.</p> <p>Tabled and adopted by the parliament appointed by the democratically elected ruling party. Public participation was limited to the extent to which their party's representatives participate in formulation and adoption processes. Parliamentary representatives are not accountable to the voters directly, only to their parties</p>	<p>Allows for the employment of under-qualified teachers in pursuit of the “workers' agenda” (Muller, 2004), especially prior to the adoption of the “Employment of Educators Act, 76 of 1998”. Ideological motivation for the adoption of Outcomes-based Education (OBE) (Christie et al, 2007), (Chisholm, 2004). Society is required to accept a new “truth” that vocational qualifications which previously had a lowly status, have increased merit because they would be placed at the same levels of qualification in the NQF, as academic qualifications (Allais, 2007). Thus the unqualified are deemed to be qualified.</p> <p>The right to strike for all unionised teachers, including sympathy strike action, in terms of collective bargaining and sectoral agreements (LRA). Only designated essential service workers may not strike (LRA). Teachers are not considered providers of essential services and are included in the public service</p>

	<p>(ANC, 2011). This party-based representative form of democracy provides low and indirect participation by the public. The LRA provides for union members to be legally favoured above other members of society, especially the unemployed, subverting the principle of equality before the law.</p>	<p>sector. As such they may be called out on strike in support of any labour dispute in the entire public sector. The right to call strikes in support of social or ideological issues championed by the communist aligned COSATU. The number of teaching days lost to strikes and other union activities has increased year by year (Visser, 2007), (Department of Labour, Republic of South Africa, 2006).</p>
<p>South African Schools Act, 84 of 1996 National Education Policy Act, 27 of 1996</p>	<p>Tabled and adopted by the parliament appointed by the democratically elected ruling party. The same weaknesses in democratic process are inherent in the formulation processes as were those pertaining to the formulation of the Labour Relations Act although these policies themselves promote democratic activity.</p>	<p>Codifies the right to education. Stipulates the political and administrative structures controlling schooling (Nel &amp; Binns, 1999). Enables the decentralisation of school education through democratic school governing bodies (Van Wyk, 2007). Regulation of school attendance, non-discrimination and a rights-based education policy (Nel &amp; Binns, 1999).</p>
<p>Curriculum 2005 (C2005) introduced in 1997 on a phased basis through to 2005. Formulated in terms of the National Education Policy Act 27 of 1996 wherein the linkage to the NQF is legislated, leading to the adoption of</p>	<p>In accordance with the National Education Policy Act, the Minister in charge has discretion to flout democratic principle by appointing the participants to consultation processes but is not required to include public participation. Formulated through</p>	<p>Learning subjects replaced with 8 interrelated learning areas. Outcomes based education (OBE) in compliance with the objectives of the NQF, conforms to “Human Capital Theory” (Chisholm, 2004). It resulted in a learner centred</p>

	<p>Outcomes-based Education (OBE).</p>	<p>consultation between political bodies, organised labour, educational bodies and organised industry in compliance with the non-negotiable NQF objectives. The imposition of the NQF was not subjected to any democratic process hence the formulation proceedings of C2005 were compromised and undemocratic.</p>	<p>pedagogy dependent upon highly qualified, capable and motivated teachers in contention with a centralised framework attempting to control outcomes (Harley &amp; Wedekind, 2004).</p>
	<p>Revised National Curriculum Statement (RNCS) introduced in 2004 without implementation phases</p>	<p>The selection of participants in the review process was subjected to political manipulation by the dominant political ideologies in order to retain OBE (Harley &amp; Wedekind, 2004). Excluded from the process, on ideological grounds, were proponents of Christian education and home-schooling. Through specific exclusion of significant voices, the process was undemocratic (Chisholm, 2004).</p>	<p>The revision process retained the discredited OBE with a new rights-orientation (Chisholm, 2004).</p>
<p>SA Communist Party</p>	<p>National Democratic Revolution (NDR)</p>	<p>Ideologically imposed policy. Adapted from the 1961 communist strategy and policy document entitled <i>The Program of the Communist Party of the Soviet Union</i> (Taborsky, 1967). Adopted as policy internally within the Tripartite Alliance (ANC, 2011). Not subject to democratic processes. Promotes anti-democratic behaviour in pursuit of political control.</p>	<p>Motivated the retrenchment of thousands of qualified and experienced teachers to be replaced by “cadres” loyal to the party (Allais, 2007). Motivated the retrenchment of experienced administration staff in the departments of education in favour of party loyalists (Therkildsen, 2001). The private and former model C</p>

COSATU	Militant Unionism	<p>Adopted by Union Leadership in compliance with an ideological position. Aligned with the NDR strategy (Slovo, 1987). Formulated through a limited application of democratic principles restricted to union members and imposed upon civil society through leverage exerted within the Tripartite alliance. Codified into law through the LRA.</p>	<p>schools attracted the professionally qualified teachers who joined the NAPTOSA and SAOU unions that are not affiliated with COSATU, and formed a strong middle-class schooling sector (Govender, 2004).</p> <p>Prevents the retrenchment of ineffective teachers. SADTU was the largest union through which COSATU was able to enforce the objectives of the NDR (Govender, 2004) through punitive strike action and militant public demonstrations. SADTU members consider themselves workers first and teachers second whereas the unions of professionally qualified teachers (NAPTOSA and SAOU) considered themselves to be responsible for providing professional, uninterrupted education to learners first and union members second (Govender, 2004) Teacher absenteeism due to SADTU strike action shows an increasing trend year on year (Visser, 2007).</p>
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**Table 8: Assessment of the Impacts of Policy on Transformational Objectives**

Transformational Objectives	Policies	Relevant Policy Statements	Policy Impact Assessment
1. Universal school attendance for all children	South African Schools Act, 84 of 1996 (SASA)	Inasmuch as SASA confers the authority and responsibility upon the Members of the Executive Councils and Heads of Departments to execute the provisions of the NEPA, the two Acts may be viewed as complementary to each other. The Act legislates compulsory school attendance for all children from the year of their seventh birthday until they either reach the age of fifteen or pass grade nine.	By 2001, schooling attainment was almost identical for males and females in all racial groups. Enrolment rates in primary and secondary school were high for Blacks, exceeding 97% through age 14 and surpassing enrolment rates of Whites beginning at age 18 (Anderson, Case & Lam, 2001).
	National Education Policy Act, 27 of 1996 (NEPA)	The protection of every citizen's rights to equal access to education institutions and non-discrimination by disability, race, gender, language, culture and religion.	This policy was geared to enabling the redress required to overcome some of the effects of Apartheid education and has succeeded in encouraged parents to enrol their children in schools through legal persuasion and the removal of discriminatory obstacles.
	School Governing Bodies (SGBs)	SGBs are legislated within the SASA for the purposes of the effective democratic management and governance of schools. A function of SGBs in the SASA states; "20.(e) support the principal, educators and other staff of the school in the performance of their professional functions."	Inasmuch as effective SGBs can facilitate communication and interaction with the school community, they can support and strengthen school attendance measures.
2. Improved teacher training	SASA & NEPA	Specifically insofar as the Acts provide for the state management of the conditions of employment for educators,	Political adherence to the NDR and incorporation of the dictates of the NQF, have largely inhibited the

		it establishes various structures to, amongst many other aspects, take responsibility for “the professional education and accreditation of educators”.	removal of unqualified teachers and served to retain an ineffective teaching core. In service training and education does not seem to have the desired effect.
	Labour Relations Act, 66 of 1995 and various Amendments (LRA)	The Act provides the rights of Trade Unions to have access to and organise and form workers' representative structures in the public sector, in the same way that it would in the private sector. The right to punitive strike action in enforcement of union resolutions to protect the socio-economic rights of their workers is legislated for.	Enables the objectives of the NDR to pursue cadre deployment whereby party affiliation and loyalty overrides suitability for the job. The employment of individuals who do not meet the basic academic standard suitable for teacher training to be effective, obstructs the improvement of the teaching corps.
	National Qualifications Framework, 67 of 2008 (NQF) – initially instituted as an extension of the South African Qualifications Authority Act, 28 of 1995	A system for the classification, registration, publication and articulation of quality-assured national qualifications by; (a) creating a single integrated national framework for learning achievements; (b) facilitating access to, and mobility and progression within, education, training and career paths; (c) enhancing the quality of education and training; (d) accelerating the redress of past unfair discrimination in education, training and employment opportunities.	The goal of integrating, had an understandable desire to unify the separate qualification opportunities offered by formal and non-formal provision that were widely seen as the cause of unequal work opportunity in the workplace. The aim was to eliminate artificial divisions between mental and manual labour by means of a centralised qualifications grid, the NQF. The “worker's agenda” could be promoted through a system that would equalize the qualifications of the proletariat with their class opponents, the salariat (Muller, 2004). Teachers training colleges were shut down in the 1990's in compliance with the NQF objective of centralisation and fitting teacher training into the Higher Education bracket which required

			<p>university registration (Metclafe, 2010). Universities on the other hand were not geared to adopt the role of teacher training and an urgent need developed where one did not exist previously. The NQF as a policy of the political Left, embraces the “Human Capital Theory”. Human Capital Theory posits that the education of the individual to learn specific attributes and skills will lead to economic growth (Christie, 1996).</p>
	<p>National Democratic Revolution (NDR)</p>	<p>As a political strategy adopted by the ANC Tripartite Alliance, it does not appear in any policy document on the ANC website. However, the NDR is present on the SACP website. The late Joe Slovo (1988) describes the need to generally pursue it in a way that is not open but rather secretively with the ultimate aim of reaching communist socialism. The ANC applies the NDR strategy through the policy of “Cadre Deployment” whereby a party loyalist is employed at every available opportunity, irrespective of any qualification issues which may normally render a candidate unfit for a particular task, in order to control the levers of power in every sphere of society (Hoffman, 2010). Slovo (1988) promoted a strategy with a negative focus based on the undermining of White privileges in all spheres of society rather than a positive approach of improving the lives of the</p>	<p>Motivates the retention of the NQF with its consequential impacts upon teacher training. Between 1975 and 1996, in a drive to recruit union members to SADTU, the number of educators increased at a faster rate than the number of learners. From 1996 to 2000, the number of state paid educators decreased but SGB paid educators increased significantly (29,939 SGB paid educators, 8 % of the total) (Perry &amp; Arends, 2003). The capacity of teachers to cope with radical paradigm shifts needed to be effectively addressed through major in-service training (INSET) initiatives (Nel &amp; Binn, 1999).</p>

		Black majority.	
	SGBs	SGBs are entitled to contribute to the education and training of teachers in terms of clause 20. (1) (a) of SASA; “promote the best interests of the schools and strive to ensure its development through the provision of quality education for all learners at the school.”	Through SGBs, funding and time may be provided for the on-going training of teachers beyond that provided by the state.
3. Solution to disaffected and under-qualified Black teachers	SASA & NEPA	NEPA legislates on aspects within the education environment such as “the professional education and accreditation of educators” and “promoting a culture of respect for teaching and learning in education institutions”	The number unqualified educators increase from 11% in 1975, to 17% in 1985 and jumped to 36% by 1996. From 1996 to 2000 the situation improved to 22% although the overall number of teachers remained virtually static over the period (Perry & Arends, 2003). The burden of the numbers of unsuitable and unqualified Black teachers employed in pursuit of the NDR, inhibit the likelihood of universities being able to upskill and improve these teachers as envisaged by the NQF.
	NQF	The NQF stipulates that teachers who are under-qualified through formal training and education, meet the required standards through various other routes based on life experiences.	The NQF strives to equalise all tertiary education. Teacher training is therefore required to produce teachers with degrees rather than diplomas and specialised teacher training colleges were closed down. The universities are unable to train students who don't meet the academic standards for university entrance. The result is a persistent shortage of properly qualified teachers. A system of INSET

			(In Service Education and Training) has been proposed by many to attempt alleviating the problem.
	NDR	The NDR motivates that party loyalist and COSATU supporting unionists are the only suitable candidates for teachers.	The NDR promotes the NQF
	Militant Unionism	The NDR strategy requires the building of a “revolutionary class” made up of “wage-workers” able and ready “to carry out decisive action strong enough to impair the existing power” (Taborsky, 1967).	Obstructs the retrenchment of unsuitable teachers to the detriment of the community as a whole.
	SGBs	Clause 20 (e) and (i) of SASA state; “support the principal, educators and other staff of the school in the performance of their professional functions” and “recommend to the Head of Department the appointment of educators at the school, subject to the Educators Employment Act, 1994 (Proclamation No. 138 of 1994), and the Labour Relations Act, 1995 (Act No. 66 of 1995)”	The SGBs can endeavour to improve the standard of teaching but are limited by the LRA and militant unionism to combat teacher incompetence or misconduct through acts of dismissal and performance-based remuneration.
4. De-racialisation and consolidation of Administrative structures	SASA & NEPA	NEPA specifically legislates on the removal of discrimination on any grounds, including race across “the organisation, management and governance of the national education system”	In 1994, the provinces and the Homelands were abolished, and nine new provinces, each with their associated administrative systems, were established. 19 education departments, with their schools, chains of authority and administrative

			procedures had to be reconstituted to form nine new provincial ministries and one national department (Nel & Binns, 1999).
	NDR	The NDR motivates that party loyalist and COSATU supporting unionists must be deployed into positions where they can effect control.	Administrative structures, staffed as they are in fulfilment of the aims of the NDR (ANC*, 2011) that promotes party control of all levers of power (Hoffman, 2010) above any considerations of ability. Hence, administrative incompetence is embedded in departments of education resulting in poor support of schools and schooling. Similarly, politically approved service providers are contracted to deliver essential services to schools and are retained irrespective of failures to deliver.
5. Improved learner performance in formerly Black schools	SASA & NEPA	The Acts legislate on the governance of every factor that could lead to the improvement of learner performance.	The legislative environment for improving learner performance through effective school governance is nullified in formerly Black schools due to the strong influence of inhibiting legislation formulated under the ideological influence of the NDR which in turn manifests its aims through the NQF, the C2005 and RNCS.
	Curriculum 2005 (C2005)	Characterised by three overarching features. Firstly, it was outcomes-based (OBE) in compliance with the NQF objectives. Secondly, an integrated knowledge system was the design feature whereby school 'subjects' were jettisoned, and eight 'learning areas'	Third International Mathematics and Science Study-Repeat (TIMSS-R) testing of grade 8 Learners in 38 countries were conducted in 1998 and 1999. South Africa's test scores in both Mathematics and Science were considerably lower than all the other

		<p>introduced for Grades 1 to 9. Thirdly, was the promotion of learner-centred pedagogy (Harley &amp; Wedekind, 2004). The NQF was systemically-driven, with a centralised qualifications framework and a monist 'one size fits all' epistemology. C2005 was teacher- and learner-driven, with highly particularised and individualised assessment procedures.</p>	<p>countries tested (Perry &amp; Arends, 2003). The UNESCO/UNICEF MLA project to test literacy, numeracy and life skills in grade 4 learners, was held across a number of African countries in 1999. South Africa produced the lowest numeracy results in Africa (Perry &amp; Arends, 2003). Independent assessments have proven the failure of the system and a subsequent revision of the curriculum was carried out.</p>
	<p>Revised National Curriculum Statement (RNCS)</p>	<p>Revision provided for a system that recognises everyone's rights in a diverse society. Retained the much-discredited OBE system in compliance with NQF.</p>	<p>Cross-national standardized tests have shown that South African learners are not internationally competitive, performing poorly even within an African context. Since the South African population is dominated by non-white groups that were disadvantaged under apartheid, an obvious explanation for this poor performance is that it reflects a lingering legacy of educational inequities from the apartheid era. Studies were carried out to measure the correlation between schooling resources and infrastructure on the one hand and performance in advancement on the other but even after controlling for infrastructure differences a large part of student performance remains unexplained. This has led to speculation about the role of less quantifiable aspects of</p>

			school quality such as school management and teacher quality (Lam, Ardington & Leibbrandt, 2008).
	Militant Unionism	SADTU, the teacher union was the largest COSATU affiliated union until the recent boom in the mining industry, It is often called to strike in support of the NDR objectives. The LRA and union pressure are used to prevent the dismissal of teachers guilty of non-performance, incompetence or misconduct.	An adversarial relationship with employers is necessary to sustain the confrontational basis of the ideology (Taborsky, 1967). It is apparent through the willingness to engage in teacher strikes, that loyalty to the doctrine is put before the overall welfare of the country and its citizens. Since the ANC's election to power in 1994, the number of productive days lost due to industrial action has been on a steadily increasing trend. Whilst strikes in mining and manufacturing have fluctuated due to periodic economic downturns, the strikes by public sector employees, including teachers and nurses, have increased steadily (Visser, 2007), (Department of Labour, Republic of South Africa, 2006). Fewer teaching days have a correlating negative impact on learner performance.
	SGBs	The SGBs have the authority and right to positively influence the performance of learners in formerly Black schools. SASA clause 20. (1) (a) states; “promote the best interests of the schools and strive to ensure its development through the provision of quality education for all learners at the school.”	Weaknesses in the traditional models of democracy and the misapplication of democratic and legal principles prevail. In formerly Black schools, parents often misconceive participative democracy for political democracy and misunderstand the role of the SGB to be a political forum. (Smit & Oosthuizen, 2011), (Lewis &



			Motala, 2004).
6. Reduction of drop out rate in formerly Black schools	SASA & NEPA	The Act legislates the compulsory school attendance for all children from the year of their seventh birthday until they either reach the age of fifteen or pass grade nine.	Learners repeating and/or dropping out, resulted in the average number of years to complete schooling to grade 12 taking 60% more time than the minimum of 12 years. The average time to complete grade 12 was 19 years in both 1997 and 2000 (Perry & Arends, 2003).
	SGBs	SASA clause 20. (d) states; “adopt a code of conduct for learners at the school” and clause 20. (f) states; “determine times of the school day consistent with any applicable conditions of employment of staff at the school”	Effective, democratic school governance has been shown to positively impact upon the maintenance and enforcement of school discipline in a relatively short time (Sheldon & Epstein, 2002).
7. Reduced class sizes	SASA & NEPA	The SASA legislates that “Every Member of the Executive Council must ensure that there are enough school places so that every child who lives in his or her province can attend school” whilst the NEPA enables the governance of “the ratio between educators and students”	The teacher to pupil ratio in South Africa in 2009 was 30.71. The highest ratio in the past 29 years was in 2001, at 37.10 and the lowest at 26.67 in 1991. (UNESCO, Institute for Statistics)
	SGBs	SASA clause 20. (l) states; “recommend to the Head of Department the appointment of educators at the school, subject to the Educators Employment Act, 1994 (Proclamation No. 138 of 1994), and the Labour Relations Act, 1995 (Act No. 66 of 1995)”	Where the funds may be available, the SGBs may recommend the employment of extra teachers (SASA). However, SGBs do not function effectively in formerly Black schools. In a survey, one third of the respondents (DoE, 2004) attributed deficient SGB functioning to contextual limitations, such as lack of public transport, the

			distance between place of residence and the school and time of meetings. Respondents included societal problems such as poverty and the prevalence of HIV/AIDS in the community. In these circumstances, even the extensive social support networks developed in communities – their social capital- are subject to immense strain and cannot easily be put to use for the purpose of building structures within the school (Van Wyk, 2007).
8. Increased funding of formerly Black schools	SASA & NEPA	SASA notes that “The State must fund public schools from public revenue on an equitable basis in order to ensure the proper exercise of the rights of learners to education and the redress of past inequalities in education provision”. SASA upholds “the rights of all learners, parents and educators, and promotes their acceptance of responsibility for the organisation, governance and funding of schools in partnership with the State”. NEPA legislates the responsibility for the determination of national policy for “facilities, finance and development plans for education, including advice to the Financial and Fiscal Commission”.	The state has equalised funding of schools across races (Lam, Ardington & Leibbrandt, 2008).
	SGBs	SASA clause 20. (2) states; “The governing body may allow the reasonable use of the facilities of the school for community, social and school fund-raising purposes, subject to	The opportunity to utilise community participation in properly functioning SGBs is available. However, SGBs need to function correctly in the formerly Black schools in order for this

		such reasonable and equitable conditions as the governing body may determine, which may include the charging of a fee or tariff which accrues to the school.”	legislation to be effective.
9. Depoliticised and balanced history curriculum	RNCS	The revised curriculum promotes the need for a new history curriculum to reflect the country's diversity	To date, progress has been slow and the issue is yet to be resolved.
10. Adoption of a teaching culture promoting problem-solving, free enquiry and active learning	SASA & NEPA	NEPA provides for an education policy that will, “encourage independent and critical thought”, “promote enquiry, research and the advancement of knowledge” but “achieving an integrated approach to education and training within a national qualifications framework”.	A Department of Education (2004) report and Lam et al (2008) confirm that teachers spend insufficient time on teaching and too much time on administration to be effective.
	NQF	The NQF motivates the adoption of Human Capital Theory in education where the bias is not towards “how to learn” but rather “what to think”.	
	C2005	The learner-centred pedagogy and integrated knowledge areas feature of C2005 promotes and requires the adoption of problem-solving, free enquiry and active learning, supported by a necessarily capable corps of teachers.	C2005 was characterised by the following weaknesses that would mitigate against its effectiveness: “.... • A complex curriculum policy; • Inadequate co-ordination and management; • Insufficient capacity in terms of personnel and finance; • Inadequate teacher development; and • Limited curriculum development. (CEPD 2000a [first draft])” (Harley &

			Wedekind, 2004).
	RNCS	The revision did nothing to reduce the contradictions facing teachers who are required to pursue OBE on the one hand and a learner-centred pedagogy and integrated knowledge approach on the other.	Detailed studies concluded that South African schools were “struggling to meet their current educational mandates in their three core functions: teaching, learning and management.” High teacher absenteeism prevailed, especially in more poorly resourced schools. Even in schools in which there is not a culture of absenteeism, a teacher workload study showed that significant teaching time was spent in non-teaching functions (Lam, Ardington & Leibbrandt, 2008).
	SGBs	The SASA legislation on SGBs is generally oriented towards SGBs being supportive of teachers and teaching	A long-run impact of apartheid (and apartheid education in particular) is that it left black parents and black communities without the resources to create a favourable home environment for learners. A large stochastic component to grade advancement can have important effects on who attends school, how much effort they invest in school, and how individual and household characteristics affect the probability of grade advancement. Increasing the involvement of the community in supporting the schools could reduce the stochastic component and make for a more predictable environment for grade advancement (Lam, Ardington & Leibbrandt, 2008).
11. Removal of destructive	SASA & NEPA	SASA empowers school governing	Formerly Black schools which, due to

<p>influences on schools of the effects of the power struggle</p>		<p>bodies to adopt and impose a code of conduct “aimed at establishing a disciplined and purposeful school environment, dedicated to the improvement and maintenance of the quality of the learning process”.</p>	<p>politicisation since the 1980s, were characterised by the so-called ‘boycott culture’ and often were effectively dominated by their local Student Representative Councils. This continues to create an undesirable legacy of pupil and teacher non-attendance, boycotts and political power-play between students and staff in schools resulting in demoralised staff and under-educated students, many of whom miss out on large portions of the teaching year (Nel &amp; Binns, 1999).</p>
	<p>SGBs</p>	<p>The act stipulates that the governance of every school is vested in its governing body and to pursue a range of activities and responsibilities to “promote the best interests of the school and strive to ensure its development through the provision of quality education for all learners” This provides the SGB with the legal authority to govern the school.</p>	<p>Research showed that systemic weaknesses in the traditional models of democracy and the misapplication of democratic and legal principles. Parents often misconceive participative democracy for political democracy and misunderstand the role of the SGB to be a political forum (Smit &amp; Oosthuizen , 2011).</p>

**Table 9: Practices authorised by SASA for SGBs to meet Transformational Objectives**

<b><u>Transformational Objectives</u></b>	<b><u>SGB Practices allowed under SASA</u></b>
1. Universal school attendance for all children	Address learner discipline issues - Clauses 20. (1) (d) & (e)
2. Improved teacher training	Contribute to the education and training of teachers - Clause 20. (1) (e)
3. Solution to disaffected and under-qualified Black teachers	Provide support for teachers - Clause 20 (e) Recommend appointment and dismissal of teachers – Clause 20 (i)
4. De-racialisation and consolidation of Administrative structures	None
5. Improved learner performance in formerly Black schools	SGBs have the authority and right to positively influence the performance of learners in formerly Black schools. Clause 20. (1) (a)
6. Reduction of drop out rate in formerly Black schools	Adopt a code of conduct for learners at the school - Clause 20. (d) and Determine times of the school day consistent with any applicable conditions of employment of staff at the school - Clause 20. (f)
7. Reduced class sizes	Recommend to the Head of Department the appointment of educators at the school - Clause 20. (i) Administer and control school property and buildings occupied by the school – Clause 20. (g)
8. Increased funding of formerly Black schools	The governing body may allow the reasonable use of the facilities of the school for community, social and school fund-raising purposes, subject to such reasonable and equitable conditions as the governing body may determine, which may include the charging of a fee or tariff which accrues to the school. - Clause 20. (2)
9. Depoliticised and balanced history curriculum	None
10. Adoption of a teaching culture promoting problem-solving, free enquiry and active learning	SGBs have the authority and right to positively influence the provision of quality education. Clause 20. (1) (a) and Contribute to the education and training of teachers - Clause 20. (1) (e)
11. Removal of destructive influences on schools of the effects of the power struggle	All of the functions of SGBs as stated in the clauses under section 20, provide for effective governance by the elected and appointed SGB at any school.

**Table 10: Analysis of the Factors Inhibiting SGBs from achieving Transformation**

<u>Transformational Objectives and Factors inhibiting their attainment</u>	<u>Actions to address the obstacles to achieving transformational objectives</u>
<p><b>1. Universal school attendance for all children</b></p> <p><u>Inhibiting Factors:</u></p> <p><i>Poverty and the prevalence of HIV/AIDS inhibit the communities from using their social support networks for the purpose of building structures within the school</i></p> <p><i>Lack of education or capacity of parents to effectively fulfil SGB roles</i></p> <p><i>Lack of understanding of participative democracy</i></p> <p><i>Teacher and pupil absenteeism</i></p>	<p><u>Enabling Actions:</u></p> <p>Enable communities to address teacher and learner absenteeism through SGBs</p> <p>Facilitate training for parents and learners in SGB functions</p> <p>Facilitation of gender equity education to SGBs and the wider school community</p> <p>Communicate and collaborate with each other in pursuit of effective school governance.</p> <p>Provide accessible channels through which community members may be informed of their rights regarding access to schooling for their children.</p> <p>Provide accessible channels through which community members may be informed of their rights to address learner discipline issues and gender equity issues.</p> <p>Provide channels to create social cohesion in school communities in the support of good teachers and extending teacher training.</p>
<p><b>2. Improved teacher training</b></p> <p><u>Inhibiting Factors:</u></p> <p><i>The ANC Tripartite Alliance's anti-democratic NDR strategy motivates the adoption of the NQF and LRA.</i></p> <p><i>The LRA subverts the authority granted to SGBs under SASA to remove unsuitable teachers.</i></p> <p><i>Political adherence to the NDR and incorporation of the dictates of the NQF, inhibits the removal of unqualified teachers and lowers qualification criteria</i></p> <p><i>The LRA enables the objectives of the NDR to pursue cadre deployment whereby party affiliation and loyalty overrides suitability for the job.</i></p> <p><i>The NQF has motivated structural changes, such as the closing of teacher training colleges, resulting in poor teacher education, unqualified and poorly trained teachers for deployment.</i></p>	<p><u>Enabling Actions:</u></p> <p>Provide accessible channels through which community members may be informed of their rights regarding the appointment and dismissal of teachers, funding of teacher's salaries and in service training.</p> <p>Provide channels to direct school community needs to responsible state authorities.</p> <p>Facilitate community networks to collaborate in support of teachers and teaching.</p>
<p><b>3. Solution to disaffected and under-qualified Black teachers</b></p> <p><u>Inhibiting Factors:</u></p>	<p><u>Enabling Actions</u></p>

*The NQF strives to equalise all tertiary education. Teacher training is therefore required to produce teachers with degrees rather than diplomas and specialised teacher training colleges were closed down. The universities are unable to train students who don't meet the academic standards for university entrance. The result is a persistent shortage of properly qualified teachers. The NDR promotes the NQF. Militant Unionism obstructs the retrenchment of unsuitable teachers to the detriment of the community as a whole. Poverty and the prevalence of HIV/AIDS inhibit the communities from using their social support networks for the purpose of building support structures within the schools. Misunderstandings by principals, educators and parents about their roles within SGB structures*

Provide accessible channels through which community members may be informed of their rights regarding dismissal of unsuitable teachers  
 Provide channels to create social cohesion in school communities in the support of good teachers and extending teacher training.  
 Facilitate community networks to collaborate in support of teachers and teaching

**4. De-racialisation and consolidation of**

**Administrative structures**

Inhibiting Factors:

*The NDR motivates that party loyalist and COSATU supporting unionists must be deployed into positions where they can effect control. The result is administrative incompetence due to employment being offered irrespective of ability and suitability for a job.*

SGBs do not have a role in meeting this objective which should fall within the competence of the state.

**5. Improved learner performance in formerly**

**Black schools**

Inhibiting Factors:

*The NQF impacts upon schooling by promoting the retention of the discredited OBE concept in the RNCS. The effects of this ideologically imposed curriculum is worst in formerly Black schools where SADTU members are employed predominantly. The LRA and union pressure are used to prevent the dismissal of teachers guilty of non-performance, incompetence or misconduct. Teacher and pupil absenteeism. High drop out rates of learners in formerly Black schools. The lack of public transport, the distance between place of residence and the school and time of SGB meetings. Poverty and the prevalence of HIV/AIDS inhibit the communities from using their social support networks for the purpose of building structures within the school*

Enabling Actions:

Facilitate community networks to collaborate in support of teachers and teaching.  
 Provide accessible channels through which community members may be informed of their rights to address learner discipline issues and to determine suitable language policies.  
 Provide channels to create social cohesion in school communities in the support of good teachers and extending teacher training.  
 Enable communities to address teacher and learner absenteeism.



*Misunderstandings by principals, educators and parents about their roles within SGB structures*

**6. Reduction of drop out rate in formerly Black schools**

Inhibiting Factors:

*Teacher and pupil absenteeism  
Lack of education or capacity of parents to effectively fulfil SGB roles  
The lack of public transport, the distance between place of residence and the school and time of SGB meetings  
Poverty and the prevalence of HIV/AIDS inhibit the communities from using their social support networks for the purpose of building structures within the school  
Misunderstandings by principals, educators and parents about their roles within SGB structures*

Enabling Actions:

Provide accessible channels through which community members may be informed of their rights to address learner discipline issues and gender equity issues.  
Provide channels to create social cohesion in school communities in the support of school attendance.  
Enable communities to address teacher and learner absenteeism.

**7. Reduced class sizes**

Inhibiting Factors:

*Misunderstandings by principals, educators and parents about their roles within SGB structures*

Enabling Actions:

Provide accessible channels through which community members may be informed of their rights regarding SGB control of school property and finances.  
Provide channels to create social cohesion in school communities in the support of school attendance and teacher development.  
Enable communities to address teacher and learner absenteeism.  
Provide channels for SGBs to communicate their concerns and needs to the relevant state authorities.

**8. Increased funding of formerly Black schools**

Inhibiting Factors:

*Lack of education or capacity of parents to effectively fulfil SGB roles  
Poverty and the prevalence of HIV/AIDS inhibit the communities from using their social support networks for the purpose of building structures within the school*

Enabling Actions:

Provide accessible channels through which community members may be informed of their rights regarding SGB control of school property and finances.  
Provide channels to generate social awareness about government policy and their effects on schools.  
Provide channels for SGBs to communicate their concerns and needs to the relevant state authorities.

**9. Depoliticised and balanced history**

<p><b>curriculum</b></p> <p><u>Inhibiting Factors:</u></p> <p><i>Parents often misconceive participative democracy for political democracy and misunderstand the role of the school governing body</i></p>	<p><u>Enabling Actions:</u></p> <p>Provide channels to generate social awareness about government policy on schools and their effects.</p> <p>Provide channels to facilitate the social discourse about the histories of communities to build social cohesion.</p> <p>Provide channels for SGBs to communicate their concerns and needs to the relevant state authorities.</p>
<p><b>10. Adoption of a teaching culture promoting problem-solving, free enquiry and active learning</b></p> <p><u>Inhibiting Factors:</u></p> <p><i>The RNCS results in teachers struggling to meet their current educational mandates in their three core functions: teaching, learning and management. High teacher absenteeism prevails, especially in more poorly resourced schools. Poverty and the prevalence of HIV/AIDS inhibit the communities from using their social support networks for the purpose of building structures within the school</i></p> <p><i>Parents often misconceive participative democracy for political democracy and misunderstand the role of the school governing body</i></p>	<p><u>Enabling Actions:</u></p> <p>Facilitate community networks to collaborate in support of teachers and teaching</p> <p>Provide accessible channels through which community members may be informed of their rights regarding SGB control of school property and finances.</p> <p>Provide channels to generate social awareness about government policy on schools and their effects.</p> <p>Provide channels for SGBs to communicate their concerns and needs to the relevant state authorities.</p> <p>Ease difficulty of SGB meeting attendance through the use of telecommunications.</p> <p>Encourage telecommunications usage to reduce the inhibiting effects of HIV/AIDS and poverty by facilitating collaboration within the communities.</p> <p>Usage of telecommunications based services to enable transparent governance processes and prevent threats or deeds of victimisation of any members of SGBs</p>
<p><b>11. Removal of destructive influences on schools of the effects of the power struggle</b></p> <p><u>Inhibiting Factors:</u></p> <p><i>Lack of education or capacity of parents to effectively fulfil SGB roles</i></p> <p><i>The lack of public transport, the distance between place of residence and the school and time of SGB meetings</i></p> <p><i>Poverty and the prevalence of HIV/AIDS inhibit the communities from using their social support networks for the purpose of building structures within the school</i></p> <p><i>Parents often misconceive participative</i></p>	<p><u>Enabling Actions:</u></p> <p>Provide accessible channels through which community members may be informed of their rights regarding SGB control of school property and finances.</p> <p>Provide channels to generate social awareness about government policy on schools and their effects.</p> <p>Provide channels for SGBs to communicate their concerns and needs to the relevant state authorities.</p>

*democracy for political democracy and  
misunderstand the role of the school governing  
body*

Ease difficulty of SGB meeting attendance through the use of telecommunications.

Encourage telecommunications usage to reduce the inhibiting effects of HIV/AIDS and poverty by facilitating collaboration

Usage of telecommunications based services to enable transparent governance processes and prevent threats or deeds of victimisation of any members of SGBs

**Table 11: Democratic “School Governance Practices” and “Actions”**

SCHOOL GOVERNANCE PRACTICES	ACTIONS
1) SGB establishment and running practices;	a) Establishment of focused channels for disseminating information for educating and informing the community about the purposes of SGBs.
	b) Democratic election of SGB representatives
	c) Adoption of appropriate SGB constitutions to govern their practice
	d) Creation of information repositories for information about roles and activities of SGB members.
	e) Utilisation of accessible channels to promote community discourse, opinion formation and consensus reaching to mobilise communities to embrace and implement school governance.
2) SGB member training	a) Provision of information resources for training of parents and learners in SGB practices.
	b) Facilitation of training for teachers, parents and learners in SGB functions
	c) Facilitation of gender equity education to SGBs and the wider school community
3) Access to information and community discourse on legislation;	a) Inform communities about their rights regarding access to schooling for their children.
	b) Inform communities about their rights regarding the appointment and dismissal of teachers, funding of teacher's salaries and in service training.

SCHOOL GOVERNANCE PRACTICES	ACTIONS
	<ul style="list-style-type: none"> <li>c) Inform communities about their rights to address learner discipline issues and to determine suitable language policies.</li> <li>d) Inform communities about their rights regarding SGB control of school property and finances.</li> </ul>
4) Monitoring and dissemination of information for control	<ul style="list-style-type: none"> <li>a) Empower communities to address teacher and learner absenteeism through SGBs</li> <li>b) Provide channels for SGBs to communicate their concerns and needs to the relevant state authorities.</li> <li>c) Establish channels to generate social awareness about government policy and their effects on schools.</li> </ul>
5) Communication and collaboration through;	<ul style="list-style-type: none"> <li>a) Establishment of channels and structures for collaborative activities between role-players in communities and school structures.</li> <li>b) Facilitation of community networks to collaborate in support of teachers and teaching.</li> <li>c) Establish channels to create social cohesion in school communities in the support of good teachers and extending teacher training.</li> <li>d) Create social cohesion in school communities in the support of school attendance.</li> <li>e) The adoption of telecommunications services to; <ul style="list-style-type: none"> <li>i. Ease difficulty of SGB meeting</li> </ul> </li> </ul>

SCHOOL GOVERNANCE PRACTICES	ACTIONS
	<p>attendance through the use of digital communications.</p> <p>ii. reduce the inhibiting effects of HIV/AIDS and poverty through facilitating convenient collaboration practices within the communities.</p> <p>iii. enable transparent governance processes and prevent threats or deeds of victimisation of any members of SGBs</p>

**Table 12: Social Media Evaluation Scores**

**Facebook Research Data**

Evaluation Criteria	Empirical Findings as at November 2012	Response & Score
1. Can users create their own unique profiles?	Facebook attempts to impose a limitation of one account per individual user by linking the account to a specific email address. The minimal Standard Profile information is name, birthday, gender and email address.	Yes. Performance Score = 4
	The user is also required to provide, in compliance with certain imposed criteria, a password to gain access to the account.	
	Additional, optional, Standard Profile information includes; An <b>Alternate Name</b> , <b>Relationships</b> with Friends and others (including family), <b>Education &amp; Work</b> – Employer, Schools and Years, Universities and Years, <b>Philosophies</b> - Religion, Political Views, People Who Inspire, Favourite Quotations, <b>Media Favourites</b> – Books, Music, TV Shows and Movies, <b>Sport Preferences</b> – Sports Played, Favourite Teams, Favourite Sports People, <b>Activities and Interests</b> , <b>Pictures and Contact Details</b> – Email Addresses, Phone Numbers, Instant Messaging Names, Physical Addresses	
	<b>Timeline Profile Options</b> - Relationship Anniversaries, Chronologically sequenced postings from your account.	
	In addition, Facebook enables a separate “Public Profile” that is accessible by search engines. These may be customised at the user's discretion.	
	Facebook offers the opportunity to create profiles that are much richer in personal and social activity data than the other artefacts evaluated.	
2. Are users able to articulate and	Friends may see Friends of Friends as long as a Friend's view has not been	Yes

Evaluation Criteria	Empirical Findings as at November 2012	Response & Score
make visible their social networks?	restricted by that Friend.	Performance Score = 4
3. Are users prompted to identify others in the system with whom they have a relationship through a bi-directional confirmation of Friendship?	Friends are established through an offer (invitation) and acceptance process.	Yes Performance Score = 4
4. Can the user set or regulate/restrict, according to user discretion, the visibility of its profile?	Every individual type of information contained in the profile may have its visibility set to one of the following; Public (everyone may see), Friends (only Friends may see), Only me (only the account holder may see), Custom (data may either be made visible to specific people and lists of people or be hidden from specific people or lists of people)	Yes. Performance Score = 4
5. Does the service enable the public display of connections/relationships?	Facebook provides an option whereby the user may disable the visibility of its Profile to public search engines. The publicly displayed profile does not show Friends. However, information may be shared through “Apps” that run on the Facebook platform. The Apps can have access to the users' connections/relationships and the user has no control over this access. The user has the option to remove the Apps that access their network of Friends. Through Apps, the service allows effective public display of connections/relationships.	Yes. Performance Score = 3
	This access vulnerability implies that Facebook performs worse in this respect than artefacts that do not serve as a platform for external Apps. Whilst the user may apply restrictions at an App level, many Apps will not allow such restrictions.	
6. Does the service provide a mechanism for users to leave messages on their Friends' profiles?	Yes, at every opportunity that a Friend's profile is visible.	Yes. Performance Score = 4
7. Does the service have a private messaging feature similar to a web based email service?	Messages can be contrived to be private when both the sending and receiving Friends have set the visibility of their posts to “Me Only”. The instant messaging facility called Chat behaves in the same way inasmuch as the chat messages are included in the user's other messages. Privacy of messages can be contrived with	Yes. Performance Score = 1



Evaluation Criteria	Empirical Findings as at November 2012	Response & Score
	difficulty.	
8. Does the service provide a mechanism to restrict visibility to profile information and postings of school children?	A child's profile and information access settings may be restricted by a knowledgeable parent or adult. A user minimum age is stipulated in the terms and conditions of use of the service but non-compliance would be difficult to detect.	No. Performance Score = 0
9. Does the service perform with functional equivalence on mobile phones and computers?	Essentially, yes but with limitations. The limitation is that Facebook provides their service only on smart-phones and feature phones which are able to run Java applications. Some features, such as Facebook Chat, are only available on smart-phones. There are also operating system discrepancies. For example, the location feature in the Messenger mobile app can only run on Android and iPhone.	Yes. Performance Score = 2

## LinkedIn Research Data

Evaluation Criteria	Empirical Findings as at November 2012	Response & Score
1. Can users create their own unique profiles?	The minimal profile data required to establish an account is First Name and Surname, email address and a password.	Yes Performance Score = 4
	<p>Additional, optional, Profile information includes;</p> <p><b>Picture:</b> A picture may be added to the profile</p> <p><b>Working Experiences:</b> Occupation (position and description), Employer, Dates of employment and referees/recommendations</p> <p><b>Education:</b> Institution, Dates of enrolment, Qualifications, Activities and societies, Referees/recommendations</p> <p><b>Personal Details:</b> Telephone numbers, IM handles, Address, Birthday and Marital Status</p> <p><b>Additional Information:</b> Websites, Interests, Groups &amp; Associations and an Application link to Twitter</p> <p><b>Additional Applications:</b> Linked applications to enable sharing and collaboration with your network. These are visible on the user profile.</p> <p><b>Skills &amp; Expertise:</b> Descriptive details of skills and expertise</p>	
2. Are users able to articulate and make visible their social networks?	Other users and contacts may be “tagged” into various categories	Yes Performance Score = 4
3. Are users prompted to identify others in the system with whom they have a relationship through a bi-directional confirmation of Friendship?	In LinkedIn, Connections are established through a bi-directional request and acceptance process.	Yes Performance Score = 4
4. Can the user set or regulate/restrict, according to user discretion, the visibility of its profile?	<p>Not to other users of LinkedIn excepting that a user can restrict the visibility of the profile picture. On the other hand, settings are available to ensure that users are notified about who views their profiles.</p> <p>Public visibility of a user profile is however restricted to the user's “Public Profile”</p>	Yes Performance Score = 3 (Fewer options available to the user than Facebook)

Evaluation Criteria	Empirical Findings as at November 2012	Response & Score
	over which the user has control as to which specific items may be seen. The Public Profiles are searchable by search engines.	offers)
5. Does the service enable the public display of connections/relationships?	Connections do not form part of the Public Profile but Contacts may see the Connections of Contacts. However, through Applications that are accessible on the LinkedIn platform, a user's connections may be made available to a broader public. There is a setting denoted "Turn on/off data sharing with third-party applications" which provides a user with protection against unsolicited sharing of their data through 3 <sup>rd</sup> part applications.	Yes Performance Score = 2 (Visibility is restricted to Contacts only as there is no option for "Everyone" to get visibility of a member's connections)
6. Does the service provide a mechanism for users to leave messages on their Friends' profiles?	Yes	Yes Performance Score = 4
7. Does the service have a private messaging feature similar to a web based email service?	In LinkedIn all messages between individual contacts displayed both in the Messages panel on LinkedIn and in the user's linked email account. Only comments or messages to discussion groups are public.	Yes Performance Score = 4
8. Does the service provide a mechanism to restrict visibility to profile information and postings of school children?	LinkedIn's privacy policy restricts access to children under the age of 18. Although the site is designed for professional people it could be used delinquently by under-aged children.	No. Performance Score = 0
9. Does the service perform with functional equivalence on mobile phones and computers?	LinkedIn provides mobile applications for specific mobile platforms. The applications are tightly integrated with the features offered by specific platforms such as Blackberry and iPhone. This results in limited availability on older generation phones and discrepancies in features from platform to platform.	Yes. Performance Score = 2

## Twitter Research Data

Evaluation Criteria	Empirical Findings as at November 2012	Response & Score
1. Can users create their own unique profiles?	The minimal user data required is Full Name, Username, email address and password.	Yes Performance Score = 2 (The uniqueness is achieved by the minimal user data being unique in combination however the profile is significantly less rich in data than Facebook , LinkedIn and even Mxit)
	Optional profile information includes; <b>a picture,</b> <b>your physical location,</b> <b>a website address and</b> <b>a free format biography statement (160 characters)</b>	
2. Are users able to articulate and make visible their social networks?	Twitter displays the members (tweeters) of networks that you are following as well as the network of tweeters who are following you.	Yes Performance Score = 2 (The networks are visible by default, not through the control of the users)
3. Are users prompted to identify others in the system with whom they have a relationship through a bi-directional confirmation of Friendship?	In Twitter, any Tweeter may choose to be a Follower of anyone else who is visible to them on the network. No confirmation is required.	No Performance Score = 0
4. Can the user set or regulate/restrict, according to user discretion, the visibility of its	No. Although the profile information is minimal.	No Performance Score = 0

Evaluation Criteria	Empirical Findings as at November 2012	Response & Score
profile?		
5. Does the service enable the public display of connections/relationships?	Inasmuch as Twitter does not operate on the basis of establishing closed networks, the answer is “no”. However, any lists and names of Followers would be publicly visible.	Performance Score = 2 (Relationships are publicly visible but the relationship is with a topic or personality rather than a person)
6. Does the service provide a mechanism for users to leave messages on their Friends’ profiles?	Again, Tweeters do not have Friends but replies or “Retweets” are posted against the identifying profile of the originating Tweeter.	Performance Score = 2 (An original message (Tweet) is put into the Twitter domain for all Tweeters to see whereas a Retweet is tagged to a specific Tweet)
7. Does the service have a private messaging feature similar to a web based email service?	All messages are publicly visible.	No Performance Score = None
8. Does the service provide a mechanism to restrict visibility to profile information and postings of school children?	No but profile data is minimal.	No Performance Score = 0
9. Does the service perform with functional equivalence on mobile phones and computers?	Twitter is essentially a mobile-centric service and functions fully on mobile phones. Enhanced services are available on smartphones like Blackberry and iPhone but the essential SMS based Twitter is available on all SMS enabled smart phones.	Yes Performance Score = 4

### Mxit Research Data

Evaluation Criteria	Empirical Findings as at November 2012	Response & Score
1. Can users create their own unique profiles?	The minimal profile data required to establish an account is a User Identity Name, Your Secret Pin, Select a Pin Retrieval Option and email address or mobile phone number, Birth day, Gender and Country.	Yes Performance Score = 2 (The uniqueness is achieved by the minimal user data being unique in combination however the profile is significantly less rich in data than Facebook and LinkedIn)
	Additional profile information is; <b>First Name,</b> <b>Last Name,</b> <b>Title,</b> <b>Status</b> and a <b>short bio-pic.</b>	
2. Are users able to articulate and make visible their social networks?	Yes, and the user has an option to hide their network.	Yes Performance Score = 4
3. Are users prompted to identify others in the system with whom they have a relationship through a bi-directional confirmation of Friendship?	In Mxit, a user may either accept, reject or block an invitation.	Yes Performance Score = 4
4. Can the user set or regulate/restrict, according to user discretion, the visibility of its profile?	No. Although the profile data is minimal.	No Performance Score = 0

Evaluation Criteria	Empirical Findings as at November 2012	Response & Score
5. Does the service enable the public display of connections/relationships?	Mxit does not appear to accommodate external applications in the manner of Facebook and LinkedIn	No Performance Score = 0
6. Does the service provide a mechanism for users to leave messages on their Friends' profiles?	Messages can be sent to a single user or a group through a temporary chat room formed for purposes of conducting a conversation. If the chat room is "public" (not password protected) the user's identities are hidden.	Yes Performance Score = 4
7. Does the service have a private messaging feature similar to a web based email service?	Yes, but all messages are via chat rooms which are moderated and therefore not private. However, the chat room concept does enable a two party only conversation (subject to mediation)	Yes Performance Score = 3
8. Does the service provide a mechanism to restrict visibility to profile information and postings of school children?	The profile information is minimal and not visible in public chat rooms. Chat rooms are moderated, especially those involving teens. Parents may block chat room access to their children. Chat rooms are segregated by age and adults may not participate in children's chat rooms. Younger users may not set up private chat rooms.	Yes Performance Score = 4
9. Does the service perform with functional equivalence on mobile phones and computers?	The services are replicated across platforms.	Yes Performance Score = 4

**Table 13: Democratic School Governance Practices by Stakeholders Analysis**

DEMOCRATIC ACTIVITIES	School Governance Practices	SSM Platform	Schools	Educators	Parents	Learners
	SGB establishment and running practices					
Information provision / Access to information		Establishment of focused channels for disseminating information for educating and informing the community about the purposes of SGBs.				
Preference measurement / Referenda, polls and representation				Democratic election of SGB representatives	Democratic election of SGB representatives	Democratic election of SGB representatives
Deliberation / Opinion formation			Utilisation of accessible channels to promote community discourse, opinion formation and consensus seeking that mobilise communities to embrace and implement school governance.	Utilisation of accessible channels to promote community discourse, opinion formation and consensus seeking that mobilise communities to embrace and implement school governance.	Utilisation of accessible channels to promote community discourse, opinion formation and consensus seeking that mobilise communities to embrace and implement school governance.	Utilisation of accessible channels to promote community discourse, opinion formation and consensus seeking that mobilise communities to embrace and implement school governance.
Will formation / Organisation formation			Creation of information repositories for information about roles and activities of SGB members.	Adoption of appropriate SGB constitutions to govern their practice	Adoption of appropriate SGB constitutions to govern their practice	Adoption of appropriate SGB constitutions to govern their practice
	SGB member training					
Information provision / Access to information		Provision of information resources for training of parents and learners in SGB practices				
Preference measurement / Referenda, polls and representation						
Deliberation / Opinion formation		Facilitation of gender equity education to SGBs and the wider school community				
Will formation / Organisation formation				Facilitation of training for teachers, parents and learners in SGB functions	Facilitation of training for teachers, parents and learners in SGB functions	Facilitation of training for teachers, parents and learners in SGB functions



DEMOCRATIC ACTIVITIES	School Governance Practices	SSM Platform	Schools	Educators	Parents	Learners
		Access to information and community discourse on legislation;				
Information provision / Access to information		Inform communities about; their rights regarding access to schooling for their children. 1. 2. their rights regarding the appointment and dismissal of teachers, funding of teacher's salaries and in service training. 3. their rights to address learner discipline issues and to determine suitable language policies. 4. their rights regarding SGB control of school property and finances.				
Preference measurement / Referenda, polls and representation						
Deliberation / Opinion formation				Inform communities about; their rights regarding access to schooling for their children. 1. 2. their rights regarding the appointment and dismissal of teachers, funding of teacher's salaries and in service training. 3. their rights to address learner discipline issues and to determine suitable language policies. 4. their rights regarding SGB control of school property and finances.	1. Inform communities about; their rights regarding access to schooling for their children. 2. their rights regarding the appointment and dismissal of teachers, funding of teacher's salaries and in service training. 3. their rights to address learner discipline issues and to determine suitable language policies. 4. their rights regarding SGB control of school property and finances.	1. Inform communities about; their rights regarding access to schooling for their children. 2. their rights regarding the appointment and dismissal of teachers, funding of teacher's salaries and in service training. 3. their rights to address learner discipline issues and to determine suitable language policies. 4. their rights regarding SGB control of school property and finances.
Will formation / Organisation formation			Inform communities about; their rights regarding access to schooling for their children. 1. 2. their rights regarding the appointment and dismissal of teachers, funding of teacher's salaries and in service training. 3. their rights to address learner discipline issues and to determine suitable language policies. 4. their rights regarding SGB control of school property and finances.			

DEMOCRATIC ACTIVITIES	School Governance Practices	SSM Platform	Schools	Educators	Parents	Learners
		Control through monitoring of functions and events and disseminating resulting information				
Information provision / Access to information		Establish channels to generate social awareness about government policy and their effects on schools.				
Preference measurement / Referenda, polls and representation				Establish channels to generate social awareness about government policy and their effects on schools.	Establish channels to generate social awareness about government policy and their effects on schools.	Establish channels to generate social awareness about government policy and their effects on schools.
Deliberation / Opinion formation		Provide channels for SGBs to communicate their concerns and needs to the relevant state authorities.		Establish channels to generate social awareness about government policy and their effects on schools.	Establish channels to generate social awareness about government policy and their effects on schools.	Establish channels to generate social awareness about government policy and their effects on schools.
Will formation / Organisation formation				Empower communities to address teacher and learner absenteeism through SGBs	Empower communities to address teacher and learner absenteeism through SGBs	Empower communities to address teacher and learner absenteeism through SGBs
	Communication and collaboration between school structures and communities					
Information provision / Access to information						
Preference measurement / Referenda, polls and representation						
Deliberation / Opinion formation		Establishment of channels and structures for collaborative activities between role-players in communities and school structures.	Create social cohesion in school communities in the support of school attendance.	The adoption a social media-based service to; - hold SGB meetings through digital communications -reduce the inhibiting effects of HIV/AIDS by enabling digital collaboration practices	The adoption a social media-based service to; - hold SGB meetings through digital communications -reduce the inhibiting effects of HIV/AIDS by enabling digital collaboration practices	The adoption a social media-based service to; - hold SGB meetings through digital communications -reduce the inhibiting effects of HIV/AIDS by enabling digital collaboration practices
Will formation / Organisation formation		Establish channels to create social cohesion in school communities in the support of good teachers and extending teacher training.	Facilitation of community networks to collaborate in support of teachers and teaching.	- enable transparent governance practices and prevention of victimisation of any SGB members	- enable transparent governance practices and prevention of victimisation of any SGB members	- enable transparent governance practices and prevention of victimisation of any SGB members

**Table 14: Analysis of Social Media Components for the Goals of the Conceptual IS**

<b>Goals of the Conceptual IS</b>	<b>Objects of Evaluation</b>	<b>Capacity to Function for School Communities</b>	<b>Capacity for Democratic Functioning</b>	<b>SSM Platform-specific Enhancements</b>
An accessible information repository for public information (Information about schooling, such as legislated rights, best practices and reference data. Accumulated statistical data. Site usage information, terms and conditions of usage and site obligations)	Wikis, podcasts, forums and UGC.	Ideally accessible via the service website. Information arranged topically. Must be available via a mobile application as well as browsers. Providing each community with essential information to effectively support its school.	Must be transparent to all users. Open public access. Mediated discourse to stop abuse. Access to the broader social discourse to inform opinions and facilitate information dissemination.	This would be the service home-page. Information accessible through a menu of topics by geographical locations. Member login page. Edited by service provider in accordance with service obligations.
Secure SGB accessible repository for SGB specific information (such as SGB education material, school discipline issues, teacher performance and remuneration, school performance data and school to community communications)	Forums, podcasts, UGC, blogs and microblogging	Only accessible to authorised community members through the service portal. School administers membership access. Accessible via a mobile application as well as browsers. Providing each community with information about the ongoing functioning of its school to foster community cohesion in support of the school.	Protected, community-wide accessibility. School specific information. Promotes the school and SGB guided discourse. Promotes deliberations and opinion formation on relevant topics. Protection of community's privacy.	Secure access with user login and password. Data secured against trawling. Befriending or membership authorised by schools to ensure accessibility to school community members only. Affiliation to groups defined by school structures and activities.
Secure and private two way communication channel between stakeholders (specifically for discourse about learners)	SNS with private communication tools between 2 members including Microblogs, UGC and SNS-type text	Accessible through the service portal for members only. Filtered by Group affiliations. Topic and content censorship to ensure privacy and youth	Trust of medium ensured through privacy protection. No option to share outside groups. Communication either one to one (member to member) or	Access to the site and affiliation to groups are system determined in accordance with the status and activities of your child in the school.

<b>Goals of the Conceptual IS</b>	<b>Objects of Evaluation</b>	<b>Capacity to Function for School Communities</b>	<b>Capacity for Democratic Functioning</b>	<b>SSM Platform-specific Enhancements</b>
	messaging.	protection. School specific applications for sourcing and disseminating information. Keeping parents/guardians informed about their learners.	one to many (member to group). Promotes the personal discourse through regular, personal news-feed. Trust reinforced through a private channel between two authorised stakeholders.	
Secure, community wide communication channel between stakeholders to conduct an open discourse	SNS with a Forum capacity for discussions and UGC sharing.	Secure access through service portal. Content censorship. Topics raised by the community. Aid to opinion formation.	Guided by service usage rules against hate-speech, gender-abuse and favouring protection of the youth. Guaranteed freedom of speech within guidelines. Free from censorship by any external party. Members may freely initiate topics of discourse. Protection of member privacy engenders trust.	Censored discourse to prevent misuse and careless dissemination of learner-based information.
Secure and private facility for holding and determining referenda and elections	SNS with purpose built election and referenda applications. Fully functional through mobile channels.	Secure access through the service portal. Electronic referenda and elections for SGB-determined issues. Aid to organisation formation and conflict resolution.	Voter identity protection ensured. Fully transparent processes to promote trust. Facilitate surveys and referenda on social issues. Voting statistics visible to every individual member. Facilitates will and organisation formation.	Specifically developed applications entirely accessible on both mobile platforms and Internet browsers.
A channel for accumulating statistical data on schools and communicating them to the community and the state	Data feeds and Forums	Secure access for authorised state officials. Secure access by members to participate in forum discussions. Measure	Social emancipation through transparent monitoring of progress in schooling. Bridging the communication gap	Applications for aggregation of accumulated statistical data for state and community consumption

<b>Goals of the Conceptual IS</b>	<b>Objects of Evaluation</b>	<b>Capacity to Function for School Communities</b>	<b>Capacity for Democratic Functioning</b>	<b>SSM Platform-specific Enhancements</b>
		and communicate progress towards transformational objectives. Provides the community with a direct means of communicating with the state.	between the state and society.	