Actor-network theory analysis of the budgetary process in the New Zealand school sector

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ATTESTATION OF AUTHORSHIP

I hereby declare that the submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

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ABSTRACT

This study aims to examine the operation of financial management practices in the New Zealand school sector, particularly in the area of budgetary process. Drawing upon actor-network theory (ANT), it specifically explores how the school participants measure their performance under the changing social and political environment through the budgetary control systems. The study highlights the interconnections among human actors, budgeting, accounting technology and other related artefacts such as school policies and procedures. Through the study of three secondary schools, it analyses the formulation of a budgetary system which could be seen as a socio-technical construction where human and non-human actors align their interests with the schools' strategic objectives. These actors negotiate, modify and fabricate to form networks that represent their interests. The interests of each participant, shaped in different forms of controversy, are conditioned by the dimensions of alliance performance, whether divergent or convergent.

Using the concepts of inscription and translation, the results of this study have provided five important lessons about the role of human and non-human actors in their relations with the social reality: (1) the budgetary process constitutes relations of power which are exercised by a wide range of stakeholders, not by the controlling actor alone; (2) the school context is conceptualised as an open system that is socially structured in a way that the school and its participants are interacting; (3) the performance of a school principal should be reviewed regularly and independently by an appointed education professional; (4) a code of conduct is recommended to regulate the conduct of a trustee of a board; and (5) the presence of "checks and balances" in the Principal–Board relationship is vital for effective school governance, and it is essential to the stability of a society.

It is concluded that the budgetary process adopts the concepts and reasoning of economics and decision making to legitimise power relations, and it is not without resistance and scepticism. When resistance occurs, the budgetary process becomes unstable. To overcome this resistance and scepticism, the translation process needs

to be continually engaged with actors, whether humans or non-humans, forming an actor-network. Ongoing stakeholder participation in school governance contributes to its success, provided that "checks and balances" are put in place to regulate individual performance.

CHAPTER ONE

INTRODUCTION

> *"Those who are powerful are not those who hold power in principle, but those who practically define or redefine what holds everyone together."*

(Latour, 1986, p. 273)

1.1 Introduction

Governments around the world are facing the challenges of public education reform which advocates decentralisation of administration and parental involvement in order to improve efficiency and effectiveness. Schools are self-managing under the leadership of the Principal. The recent debacles at some schools have raised an issue of power relations in organisations.

A person has power but nothing happens – he or she is powerless; another person exerts power over others who perform the action – he or she is powerful. In discussing the powers of association, Latour (1986) explains this paradox: power is not something that a person can possess; power must be treated as a consequence rather than a cause of action. In other words, the amount of power is reliant on the number of people who act upon it, not the power a person has. The notion of power stands on the belief in what holds the collective action in place. The notion of power is the consequence of an intensive activity of enrolling, convincing and enlisting. Hence, it leads to the debates about the origins of society, the nature of its components, and their interactions.

It should be noted that people in the society are associated together in one way or another. What holds people together in shaping the society lays the philosophical foundation for this research study. The scene of this study is the school sector where the young generation is educated and nurtured. In 1988 the Rt. Hon. David Lange, the then Minister of Education, remarked in his report, *Tomorrow's Schools: The Reform of Education Administration in New Zealand*, "In our children lies our future.

The education they receive shapes them individually and as members of a larger society."

Schools are the nurturing ground for teenagers who develop their knowledge base and value system to strive in a society and to reach their full potential. As the title of the thesis suggests, this study is about case studies of secondary schools in the aspect of financial management, particularly focusing on the budget setting process. Through the examination of the budgetary process, both human and non-human interactions are theorised, and the power relations between humans and non-humans are explored.

1.2   Controversies in the School Sector

This section discusses a number of controversial issues in schools. These issues have put the student learning at risk. It is noted that education is the backbone of a society where knowledge is the primary driver of economic growth. With the advent of education reform, it is timely to examine the real situation in schools which forms the setting and the context of this study.

1.2.1   School Donations

In recent years, headline-catching scandals regarding financial mismanagement and other improprieties involving governance and management in a number of state schools have received publicity on the debate about school donations. The current economic turmoil has even stirred up talks and thoughts on the persistent controversy that "free" education is a mirage. Under the economic recession, families are vulnerable to redundancies and job instability. Schools fear voluntary donations are at risk, whilst parents are pressured to pay for education promised as "free".

During the beginning of the school year, parents receive newsletters from schools asking for donations. Parents would like to know where the school donations will go. It is unlikely that parents would choose to go in to a school and ask to see the

accounts. However, even without examining the accounts, parents and the public should be able to access the school accounts through an open and transparent system.

Under Section 3 of the Education Act 1989, every person is entitled to free education at any state school up to the age of 19. The Ministry of Education provides clear guidelines that donation is voluntary and cannot be made compulsory. Most importantly, schools cannot demand payment of the donation to confirm enrolment at the school or make the students embarrassed because of this issue. However, schools seem to downplay the Ministry's guidelines and continue to seek funding from parents. Schools implement ingenious tactics to get donations from parents. Students whose parents have not paid the school donations are asked to pay higher fees for attending camps or the school ball. Schools employ agencies to call parents at home and urge them to pay school donations or fees. Students are denied access to a course if the school fees are unpaid. These approaches of demanding school fees are very clever but are totally condemned by the Ministry.

A preliminary survey found that almost half of the families are not paying school donations ("Half are not", 2008). Schools in wealthy communities receive a higher percentage of school donations than those in poor communities. The percentage of collection varies from as low as 10 percent to 90 percent. The amount of donations sought may range from as little as $20 to more than $400 per child per year. One may have an impression that there is a price differentiation on "free" education. The driver for this differentiation is the decile system in which low decile schools receive more government funding than high decile schools.

The debate whether government funding for education is adequate is intense. The New Zealand School Trustees Association has reiterated that schools are not adequately funded to provide the quality education that parents demand. The president of the association, Lorraine Kerr, argues, "It used to be that parents fundraised for the 'nice to haves', now they are being asked to fundraise to subsidise what's happening in the classroom" (Smith, 2009). Coupled with the high expectations from parents, schools have been pressured to raise extra money to meet their demands. Schools need funds to purchase modern computers and associated software, to pay a professional artist to tutor students, to send students on a

leadership-style camp, to install data projectors in classrooms and the like. Unfortunately, the Education Act does not spell out what the government is obliged to provide for the quality of education promised as free.

On the contrary, the then Education Minister Chris Carter had repeatedly defended that the level of funding to schools had almost doubled since 1999 ("Half are not", 2008). In a receptive approach, the present Education Minister, Anne Tolley, stressed that schools could not force parents to pay school donations, but such contributions would help schools provide a greater range of educational experiences for the students (Smith, 2009). The Minister's ambiguous comment on school donations has outraged parents and principals. It suggests that the state education system is no longer free and a call for the review of school funding is necessary.

Under the prevailing funding system, schools are empowered to spend the discretionary funds that schools have control over after day-to-day running costs have been met. These discretionary funds include parent donations, school fees and locally raised funds. The devolution of financial decision making to the school site level is the consequence of the education reform in 1989. Likewise, education reform is one of the products of the New Public Management Reform in 1980s. These reforms have completely changed the way the public service operates and the way the schools conduct business. These two reforms are detailed in Chapter Two.

1.2.2 School Governance – A Tale of Two Schools

Criticism of schools' management and board governance has recently been reported in the media. The Minister of Education has dissolved several boards of trustees and appointed commissioners in their place. The Education Act 1989 provides the Minister of Education the power to apply interventions in schools if he or she has reasonable grounds to believe that there is a risk to the operation of the school, or to the welfare or educational performance of its students. The interventions available include engaging specialist help, appointment of a limited statutory manager, dissolution of the board and the appointment of a commissioner.

During 2007, there were 53 statutory interventions, compared with 51 in 2006 and 55 in 2005 (Ministry of Education, 2008). At the end of 2007, about 4 percent of all state[1] and state integrated[2] schools were subject to statutory interventions. Seventy-five percent of interventions were initiated in response to requests from school boards. Most commonly, the identified areas of risk that justified interventions were related to employment and/or financial management matters.

In regard to the issue of interventions, the media attempt to speculate about the cause, who was to blame, and who were the victims. The teaching professional bodies call for an urgent review of the *Tomorrow's School* governance system. The parents are concerned for their children's safety and learning environment. The communities are dissatisfied with the lack of their involvement in school governance.

Before drawing any valid reasons for the cause of the problem, it is necessary to actually understand what particular issues the schools are facing, and who are the key players within or outside the school that have influence on the school governance. This can be illustrated by examining two scandals which have happened in schools and have caused public debates about the effectiveness of self-managing schools.

1.2.2.1   Fairfield College

In December 2008 at Fairfield College, the school staff passed a vote of no confidence in the Principal, the senior management and the Board of Trustees. Subsequently, a large number of students (200 students out of 1,235 roll) came out of the classroom and protested against the school's leadership. After that, a community meeting was held at the Fairfield College marae to discuss divisions within the school. More than 200 people including staff, students, parents and police attended the meeting (Harper, 2009a). One of the main concerns was the number of

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[1] "State schools" refers to government-funded schools which provide education free of charge to pupils.
[2] "Integrated schools" refers to schools with a religious focus that used to operate as private institutions, and they have been integrated into the state system. Integrated schools receive the same government funding for each student as state schools but their buildings and land are privately owned so they charge an attendance fee in order to meet their property costs.

Māori students being stood down or excluded from the school. The community was also concerned about the National Certificate of Educational Achievement (NCEA) results and the well-being of the students (Harper, 2009a). Finally, the school board resigned in February 2009. In pursuance of the provisions in the Education Act 1989, a commissioner was appointed by the Minister of Education to work with the school management. The commissioner took on all the statutory functions, powers, and duties of the board and he undertook a range of employment and relationship issues at school.

The school had been under-performing in student achievement for years. The Principal came to the school in 2007 and tried to turn the school around. She started implementing initiatives to raise student achievement. The initiatives included raising the teaching ability and disciplining the students who misbehaved by suspension. The teachers were required to have their performance appraised and be held accountable for student academic results. These new initiatives put threats and tensions on the teachers, students and parents who were resisting changes at school.

Since the new initiatives were implemented, there had been deep divisions over the school's direction and personality clashes between the Principal and the senior management team, the teaching staff and the Board (Harper, 2009b). Problems had arisen because of the change of the management style that challenged the existing culture at the school. This resulted in high staff turnover and low staff morale. Turnover of teachers was as high as 47 percent in the last two years ("Chaos at the college", 2009). The high staff turnover and personality conflicts were significantly affecting teaching and learning, the staff, students, and the local community. The community was dissatisfied by the lack of consultation and collaboration, and the limited transparency and accountability (Harper, 2009a). It was also suggested that the union activists of the PPTA[3] provoked disruption which intensified the problems. The Board called it "a campaign by some teachers resistant to change, to undermine the authority and leadership of the principal and the board" (Harper, 2009b). The

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[3] PPTA refers to New Zealand Post Primary Teachers' Association. It is the professional association representing teachers and principals in secondary and area schools, and teachers in intermediates, technicraft centres, and community education.

teachers challenged the management by refusing to participate in consultation, file reports and information, carry out management instructions, and meet deadlines.

The situation had been exacerbated after two deputy principals retired at the end of term one in 2008. The teachers believed that the two deputy principals worked hard and the positive Education Review Office report received in May 2008 was a reflection on the old school management team at the school.

The chaos at the college highlighted the distrusting relationship between the school management, teachers, students, parents and the community. The members of the Board were elected by these stakeholders who have the right to be consulted and participate in developing the school's strategic direction. Without the stakeholders' involvement in developing the school's directives, the school Board could fall apart and all individuals would act on their own interests. Ultimately, the victims could be the students whose academic achievement would be at risk.

On the other side of the coin, the principal's initiatives of raising student achievement had been successful. At the college, Level One NCEA rose from 39 percent in 2006 to 51 percent in 2007 ("Chaos at the college", 2009). A remarkable success in raising student achievement was also achieved during her tenure at Rodney College before she came to Fairfield College. This encouraging result had received applauding feedback from the parents and the education professionals. Unfortunately, the success of raising student achievement failed to sustain. In 2008, there was only a 29 percent pass rate in Level One NCEA. This appalling result may be caused by the governance issue during the year at the expense of student achievement.

In March 2009, the commissioner, Dennis Finn, in his letter to the community commended the staff for the hard work they were doing and sought the community's endorsement to support Fairfield College through the difficult times. He continued to highlight that the key to success is to focus on the future achieving shared responsibility.

It is beyond question that raising student academic achievement is the right strategic direction in leading a school. But why are there people who do not support this strategic initiative for the school? Why are there people who disagree with changes? Are there a few people who obtain the right to express and represent the many silent individuals of the community? These issues are open to question in this study.

1.2.2.2 Cambridge High School

In 2004, Cambridge High School received a highly critical report from the Education Review Office on the school's management. The report revealed that the Principal and some senior staff behaved badly in their relationships with staff. Allegations of staff bullying over several years were uncovered ("Report damns Annan team", 2004). The report strongly criticised the Board for failing to carry out its governance role, and directed the Secretary for Education to appoint a commissioner to replace the Board. The report highlighted a number of governance issues:

- School strategic management systems were poorly developed and the targets in the strategic plan were not comprehensive.
- Curriculum resources were insufficient to meet the students' learning needs.
- The current computer network provision did not meet learning and administrative needs and it was not reliable.
- The Principal's performance had not been annually appraised against the professional standards as prescribed by the Secretary for Education under the State Sector Act 1988.
- The Board was failing to provide a safe working environment and it did not take responsive actions on complaints addressing personnel issues.
- The Board had failed to establish effective systems to ensure that its records were kept in order.
- There was little confidence in the leadership of the chairperson in the interests of the school and its students.
- The Board failed to document the student suspensions and exclusions systems.

- The Board failed to develop policies and procedures in dealing with disclosures from students about physical, emotional or sexual abuse.
- School facilities were poorly maintained and they were unsafe for students (Education Review Office, 2004).

The Principal allegedly manipulated student assessments with a view to achieving a 100 percent NCEA pass rate. She achieved her target by using untrained teachers to assess students in the discredited "Achievement Recovery" programme ("Good riddance to Alison Annan", 2004). It was also accused that teachers who were put in charge of Achievement Recovery had written assessment answers on the board for students to copy (Graham, 2004). The New Zealand Qualifications Authority (NZQA) took disciplinary action under section 255A(2) of the Education Act 1989 by issuing the school with a compliance notice which was the first given to a secondary school and one of the most serious penalties the NZQA can impose (NZQA, 2004).

The Principal was also strict on student discipline. The school had been criticised for imposing tough disciplinary action on students such as suspensions and exclusions. However, its reputation for strict discipline attracted parents to send their children to the school. This resulted in boosting the roll from 1,000 students to about 1,200 within a year.

The Principal also wanted the school at the cutting edge of technology. She replaced the library with a cyber-café claiming that the library was rarely used by the students.

Her ambition had been firmly rooted in the school's cultures. Under her stringent management regime, there was no room for the consideration of personal circumstances ("Good riddance to Alison Annan", 2004). To maintain her authority at school, staff members had to follow a strict set of rules without challenging and questioning.

She was also accused of a conflict of interest in which she had a financial interest in two private companies, both involved in the education of overseas students, while she was the Principal of Cambridge High School. The Auditor-General conducted an

audit and an investigating report was published in October 2005. The Auditor-General had an opinion that the Principal of Cambridge High School had a conflict of interest between her duties as Principal of the school and her involvement in the affairs of the companies, intending to gain personally from assisting with their establishment and operation. The report also recommended the Ministry of Education to provide guidance to schools on the management of conflicts of interest to uphold the reputation of the public sector (Controller and Auditor-General, 2005).

There were deep divisions among staff and in the community. The public criticised the Principal for using different standards against those who offended against her standards, but she seemed unable to adopt the same standard for herself ("Principal has not learned", 2005). Her independence, integrity and professionalism had been compromised by her personal interests. Unfortunately, the Board was unable to identify the conflict of interest in the first place, and secondly there were no policies and procedures to provide guidance to the Board in managing a conflict of interest when it arose. Despite the above allegations, the Principal received a lot of support from the Board who believed that she had changed the school dramatically.

These issues were likely the consequences of the Principal's uncompromising management style. Under the public criticism and the increasing pressure from the Ministry, the Principal resigned on 13 August 2004. This ended her role as the Principal of Cambridge High School for 12 years. The Board was later sacked one month after the Principal had resigned and two limited statutory managers were appointed by the Minister of Education to manage the school in the absence of the Principal.

A year later, the Education Review Office issued another report in November 2005. The report highlighted the following areas which were previously defective and had made significant improvements:

- Policies and documents were properly documented.
- A short-term strategic plan was developed.
- A review system was established.

- Students were learning in an attractive physical environment.
- Staff interrelationships were improved (Education Review Office, 2005).

A community reference group was established and worked with the school management by giving inputs and receiving information on the progress of the strategic plan. A new library was built with substantial computing resources which assisted in student learning. Sound quality assurance practices were introduced to meet students' developmental and learning needs. The new Principal was skilled at motivating staff by building a positive and participatory school culture. Staff morale was considerably improved. The report finally remarked that student learning should improve in the positive change environment.

In March 2006, Ministry of Education intervention ceased and a new Board of Trustees was elected. The Education Review Office re-visited the school and issued a report in August 2008. The report appraised the work of the Principal who provided effective professional leadership for the school and managed change to raise student achievement. His inclusive management style promoted positive relations which improved staff morale and supported the school's ongoing development. Trustees shared a commitment to the strategic direction of the school through consultation and involvement. There is no doubt that the school has gone through a long journey to recovery.

1.2.3   Implications of the Scandals

The two scandals have confirmed the researcher's motivation to study the school budgetary process while she was working at a state secondary school. There are many good reasons to build a trusting relationship between the Board, the Principal, staff, students, parents and the community. Undoubtedly, a trusting relationship will bring efficiency and effectiveness to school management. How far should this trusting work relationship go? Should the Board be reliant on information only from the Principal for decision making? How should informed decisions be made?

Under the *Tomorrow's Schools* system, it is arguable that principals are empowered more than necessary to carry out their authorities. Most likely, there are inherent risks when a charismatic Principal controls a school Board or a school Board dominates a Principal. One should take a deep thought on how the mutual purposes of empowerment could be established between the Board and the Principal.

When one turns to look at the new regime after the scandal at Cambridge High School, he or she may wonder what has made the positive change environment at the school. How did the staff, students, parents and the community change their opinions and behaviours in the school?

Before answering the above questions, it requires an intensive examination of work relationships among the stakeholders of a school. This study particularly places more emphasis on the budget setting process as it concerns allocating resources – the root of the problems found in Cambridge High School and Fairfield College. The two scandals at schools have provided valuable insights into the aims and rationale of this study.

1.3   Aims and Rationale of the Study

A school could be viewed as a miniature community in which actors are linking, interacting and negotiating. A school is a reflective construction of its social reality in such a way that individual actors are associated with each other and acting upon power effects. This study is underpinned by this spirit of critique. It attempts to zoom in the focus lens on how the school budget is operated.

The primary aim of this study is to examine the operation of financial management at schools, particularly in the aspect of the budgetary process through the lens of actor-network theory (ANT). Under the framework of education reforms, it specifically explores how the organisational participants measure their performance under the changing political and social environment through the budgetary control systems. Through this, the study highlights the interconnection between the human participants and the accounting technology. This interorganisational relationship

interweaves with the existing set of norms and practices that affect the operation of the budgetary process and vice versa. The interests of each participant shaped in different forms of controversy are conditioned by the dimensions of alliance performance, whether divergent or convergent.

The framework of this study has been established in 2007 and the proposal was submitted and approved by the Auckland University of Technology (AUT) Doctoral Studies Board in 2008. The latest scandal that happened at Fairfield College in 2008/2009 is a typical example of consequences when the relationships between stakeholders of an organisation break down. This scandal has provided hindsight to the focal concern of the research and confirmed the rationale of this study.

This study is motivated by several factors. Firstly, there has been significant growth in government expenditure on schools.[4] The total expenditure on schools in nominal terms was increased by 86.2 percent from $3,079 million in 1996/97 to $5,732 million in 2006/07. This was a 49.9 percent increase in real terms. The size and importance of the school sector is considerable. As at June 2007, 2,570 schools received $5,732 million from government funding which contributed to 11.5 percent of total government expenditure ($49,900 million) or 3.4 percent of GDP ($166,714 million). Spending on schools is expected to rise in the future years. Funding allocations are determined by the decile rating of the school; the schools of lower decile receive more money. However, many schools are operating on thin margins and constrained budgets, and are reliant on locally raised funds to provide quality education which is over and beyond the minimum requirements promulgated by the Ministry of Education.

Secondly, the recent newspaper headlines: "Schools pressure parents on donations", and "Principals push MPs for more cash", highlight the persistent challenges for operating under the insufficient operational funding the school sector is facing. Schools have to raise local funds such as parent donations in order to supplement the shortfall. In this circumstance, parents are being pressured to pay "school donations"

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[4] For details of government expenditure on schools, please refer to the publication: *State of Education in New Zealand 2007* (Ministry of Education, 2007b).

for public education which is promised as "free". Rising petrol and food prices made the parents' donations more difficult. These controversies have been persistent for years, but the government seems to ignore these concerns claiming schools were by and large in good financial shape (Wilson, 2006). Opinion disparity between schools and the government offers a valuable opportunity to explore the current practices of budgetary process employed by schools.

Thirdly, since the introduction of *Tomorrow's Schools* in 1989, the responsibility for school governance has been transferred to the boards of trustees, and the Principal is charged with the school management. Schools have full control over discretionary funds after day-to-day operating costs have been met. Thus a robust budgetary control system is crucial to a school's operational success. Little attention has been paid by academics as to how schools manage their budget insofar as there is growing interest in management accounting research. This study will contribute to the accounting literature in financial management and a better understanding of budgetary process at schools.

Fourthly, given the shortage of government funds to meet the increasing costs of support staff, additional teachers, information and communications technologies (ICT) and property, schools are facing challenges in running their core business – delivery of education. Under free education, parent donations are totally voluntary, and schools find it difficult to rely on this source of income. How does a school manage its financial resources in order to make sure expenditure is within budget? How does a school explore additional income streams to supplement the insufficient government funds? How does a school allocate its limited financial resources? These are interesting questions this study attempts to examine.

Last but not least, the shortfall of government funding, coupled with the uncertainty of voluntary revenues, limits the amount of discretionary funds. It is theorised that schools tend to favour certain projects or activities which have achieved high performance. The participants in the budget setting process may be likely to have considerable influence on making resource allocation decisions during the process.

1.4 Contributions of the Study

Two decades have transpired since the education reform in 1989. Many studies have been undertaken in the areas of school effectiveness and improvement to the student achievement. Their findings have mainly focused on the issues of the government funding, staffing and workload, parental involvement, and innovative themes. The coverage of board governance in the school sector is very limited. In particular, the areas of budgetary process and making resource allocation decisions in the school sector are little known in the current literature. This study will revolve around these areas to fill the knowledge gap.

The primary aim of this study is to examine the operation of the budgetary process in schools through the analysis of ANT. ANT is employed in this study on the premise that it provides a theoretical framework to help identify, describe and understand empirical data characteristics that are peculiar to the school sector.

Under the self-management framework in schools, the Principal is given the delegated authority by the Board to lead and direct the school to achieve the established strategic objectives. The Principal could become the powerful actor who has considerable influence on the school governance. In actor-network terms, the Principal is the focal actor who has the power to enrol actors into both the local and global networks forming alliances of aligned interests. The Principal has the power and authority to allocate resources in accordance with the school's strategic planning. The budget setting process is hypothetically a tool for control over "budgetees" in a way that it gives the actions of the "budgeters" legitimacy and provides the participants with opportunities for negotiations. The person who manoeuvres the accounting technology is also a powerful actor in controlling the school resources. Drawing upon ANT, this study explores the power of the Principal which is derived from controlling information flows and alliances of the Board, the senior management team and accounting technology.

Through case-based research of three purposively selected schools, this study provides an understanding of the schools' initiatives to cope with the financial constraints they are experiencing, and offers some reasons for the success or failure

of school governance by an examination of the connectivity between the Principal and the Board as well as other stakeholders. It also seeks to find a solution to the problems that have been experienced in the school scandals.

This study also attempts to add to qualitative research on the contention that an organisation is an open system in which humans interact with their social world, interpret the social reality based on their lived experience and prior knowledge, and build knowledge through social construction of the world. Qualitative case study method is applied in this study as it provides primary and real life data that best describes the phenomenon being observed.

The findings of this study will help improve public knowledge in budget management and board governance in schools. It may also provide valuable insights for the policymakers into reviewing the formula for funding schools, for the Ministry of Education into issuing school governance and financial management guidelines, for the school Board of Trustees into setting policies and procedures on governance and financial management, and for the accounting regulatory body into setting accounting standards for the public benefit entities.

1.5   Structure of the Thesis

This thesis is structured into eight chapters. Chapter One introduces the setting of this study by examining two scandals at schools. The aims, rationale and contributions of the study are summarised. Chapter Two revisits the public management reform and hence the education reform, and provides a literature review of the purposes of accounting and budgeting in organisations and schools alike. Inside this chapter, the research questions are framed. Chapter Three describes the research methodology employed and justifies the use of the qualitative research approach in this study. This is followed by an account of the case-based research method and research design deployed in this study. The reliability and validity of the case study is also discussed. Chapter Four provides the main concepts of ANT and sets out a review of accounting research studies using this framework. Chapter Five presents a background to the three cases under study. Chapter Six summarises the

findings and provides a discussion informed by ANT. Chapter Seven provides an answer to each research question and attempts to suggest a solution to the problems prevailing in school governance through an actor-network framework. Chapter Eight presents the contributions to literature, theoretical implications and implications for practice and policy. It also recommends further research opportunities. Finally, it concludes with the lessons learned from the study.

CHAPTER TWO
LITERATURE REVIEW

2.1   Introduction

This chapter provides a brief account of the new public management reform in an international context as well as in New Zealand. It also examines how the education reform was ignited from the public management reform. It is then followed by a critical review of the purposes of accounting and budgeting in organisations and specifically at schools. The school's use of operational funding is also discussed. Finally, the research questions are framed in such a way that a reflexive construction of the scandals examined in Chapter One is incorporated.

2.2   New Public Management Reform in an International Context

Over the past 20 years, there have been drastic changes in the public sector of a number of countries like the United States (US), the United Kingdom (UK), Australia and New Zealand. The public sector is the heart of a country's economic activities which are wholly owned and financially controlled by the central government. The public sector consists of organisations which provide public utilities and services essential to the society at large (Broadbent & Guthrie, 1992). These public organisations are responsible for making policy, allocating funding and administering public services. They are traditionally accountable to the central government for integrity, compliance and control. They are centrally administered to ensure public money is legally and appropriately spent.

The recent technological innovations and economic globalisation have shaped the public sector to align with the attributes characterised in the private sector: efficiency, effectiveness, cost saving, and performance accountability. Hood (1991, p. 5) describes this type of public management as a "business-type managerialism in the public sector". These administrative reform doctrines are built on concepts of

contestability, user choice, transparency and incentive structures. To achieve targeted results, an organisation requires professional management to produce desirable outputs and/or outcomes with measurable inputs.

Other contributory factors for this change may be the fiscal crisis of the country and the increasing size of the public sector (Broadbent & Guthrie, 1992). "Thatcherism" in the context of the UK, "Reagonomics" in the US, "Rogernomics" in New Zealand, and "Economic Rationalism" in Australia are the typical ideological terms to describe the public management reform. Hood (1991) explains the rationale behind the new public management initiatives. They include:

- downsize the growth of public spending and staffing;
- move toward privatisation and decentralisation of administration;
- improve efficiency in delivering public services; and
- increase exposure of the individual country to international agenda.

2.3 Public Sector Reform in New Zealand Context

Reforms to New Zealand's public sector management began in 1985 with a consistent set of principles and approaches across all government organisations (Scott, Ball, & Dale, 1997). Under the concept of privatisation and corporatisation, the structure and nature of the public service became turned to the underlying objectives of efficiency and effectiveness. The reforms had also brought about fundamental changes in administrative restructuring in the central government. These programmes meant that the ownership of the public organisations was shifted from the government to the service providers. Some residual control was still possible through the allocation of governmental funding for providing public services. A typical example is the school sector which provides education funded by government grants and allocates financial resources for learning programmes. Some forms of performance accountabilities are expected by the central government from the service providers through the process of financial reporting.

The State Sector Act 1988 has, in effect, empowered the personal accountability for inputs and outputs performance to the Heads of Departments. The Heads of Departments are "chief executives" of the departments who are fully responsible for running the departments – employing the staff and determining the organisational structure. Section 32 of the State Sector Act 1988 charges the chief executive with the duty to be responsible to the appropriate Minister for the performance of departments in terms of efficiency and effectiveness. One may argue that where public organisations are operated with non-profit objectives, efficiency measured in monetary terms may not easily be measured.

In discussing accountability, Hood (1991) proclaims that the underlying principles which support accountability include public choice, transaction cost theory and principal-agent theory. Under the public sector management reform, public organisations, whether producing goods or delivering services, have to respond to the market disciplines, satisfy the customers' needs and answer to their outcomes.

The public choice problem lies in the notion that while public sector bureaucrats are supposed to work in the public interest putting into practice the policies of government as efficiently and effectively as possible, they are motivated partly, if not wholly, by their own self-interest. The transaction costs of collecting information and influencing policymakers enable voters with special advantage to be joined together to get favourable legislation enacted at the expense of the wider public interest (Scott et al., 1997).

The principal-agency theory refers to the transaction costs involved in aligning the individual interests in the public organisation with the policy objectives. These agency costs include the costs of establishing, monitoring and controlling the individual activities.

From this perspective, the objective of the policymakers of the new public sector management is to avoid public choice problems and minimise the agency costs (Scott et al., 1997). Translating these precepts into policy practice, the policymakers incorporate a number of concepts which have remodelled the administrative

structure of public organisations. Scott et al. (1997, p. 360) provides a number of these concepts:

- separation of ownership and control in government businesses;
- separation of the government's interests as the owner of an organization from its interests as the purchaser of the services of that organization;
- separation of funding, purchasing, and provision of public services;
- clear specification of the performance objectives of government organizations, using commercial financial criteria for business organizations and outputs for core government administration;
- a distinction between outputs and outcomes[5]; and
- privatization to strengthen incentives for efficiency of resource use through private sector governance arrangements involving competition for ownership in the capital markets.

Planning and Programming → Budgeting → Budget Execution and Reporting → Audit Evaluation →
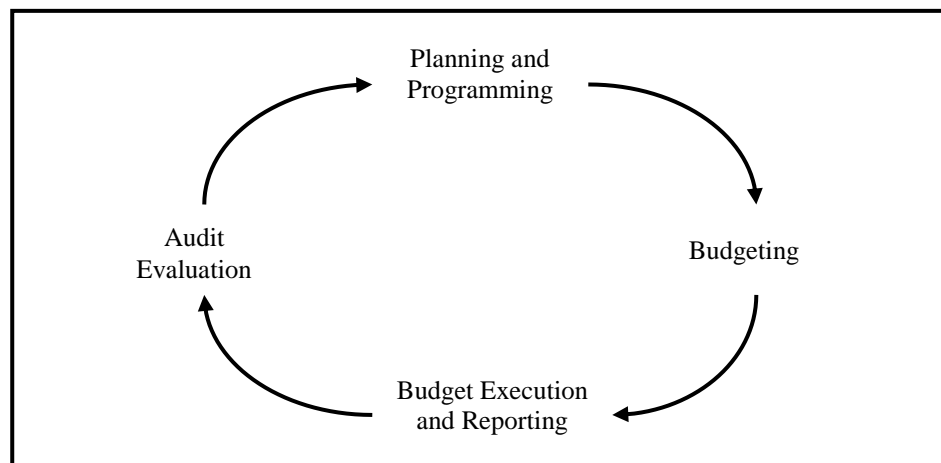
Figure 1. The financial management process

Source: Scott et al. (1997, p. 361)

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[5] Output is the quantity of goods or services that are produced in a given time period. The outcome is the result of an action or the benefits derived from the course of an action. For instance, in School A the output is 100 students achieved Literacy Level One, and the outcome is raising the Literacy Level One to 60%.

Figure 1 outlines the management cycle which links closely the different elements of the process: a unified budget and accounting system, the need to budget and account on the same basis, and the value of information in decision making throughout the cycle. In the quest for better governance, Scott et al. (1997) believe that modern management theory and practice offer a solution to problems identified in government management.

2.3.1 Education Reform

The public management reform in the school sector involves the changes to its administrative structures and processes. These changes include decentralisation of decision making, abolishing the intermediary stages of administrative structures, and increased community participation in education. One significant aspect of education reform is the establishment of elected boards of trustees who are responsible for the governance of individual schools. Then the Board delegates the authority to the Principal to manage the school.

Prior to the public sector reform, government management was criticised as bureaucratic and heavily interventionist (Scott et al., 1997). The increasing concerns of effective management practices and responsive decision making in the education system were reflected in the *Report by the Taskforce to Review Education Administration* (the Picot Report). The Taskforce was set up in 1987 to examine the education administration system and make recommendations to improve its efficiency and effectiveness. The intentions of the government were explicitly summarised in the terms of reference of the Picot Report:

- a review of functions to maximise delegation;
- an evaluation of governance to accelerate devolution;
- a redirection of administrative services to enhance client satisfaction[6], and
- a reorganization of structure to achieve greater effectiveness, efficiency and equity.

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[6] "Client" refers to parents who make parental choice as to which school they will send their children for education.

The Taskforce criticised the over-centralised and complex administrative structure in schools that lacked timely and informed decision choices. The members of the Picot Committee believed that "the devolution of decision-making power, resources and accountability was an effective means of altering the balance of power between the providers and the clients to gain greater institutional and systems responsiveness" (Macpherson, 1989, p. 33). The Taskforce made the following recommendations:

- The decision-makers should have control over the available resources.
- The decision-makers should be held accountable for their actions.
- An administrative structure should be open to scrutiny and responsive to client needs and demands.

The government accepted the Taskforce's recommendations and implemented the reform over the following 18 months as outlined in the Report, *"Tomorrow's Schools: The Reform of Education Administration in New Zealand"* by the then Minister of Education, the Rt. Hon. David Lange.

The educational reform began in October 1989 with the introduction of *Tomorrow's Schools*. The underlying principles for the reform were the notions of community involvement in education and decentralisation of school management. The responsibility for running and managing schools was transferred to parent-elected boards of trustees. The board members included the Principal, a number of parent representatives, a staff representative, a student representative and other people from the local community. The Board of Trustees became the employer who would appoint and employ the school Principal, teachers and other school staff. Generally speaking, the Principal, acting as the chief executive of the school, has the power through the Board to employ, discipline and dismiss staff, allocate financial resources and make day-to-day operational decisions.

The original concept of the reform was to decentralise the administrative power so the schools themselves could respond more quickly to an ever changing economic environment and the labour market. To improve the responsiveness and effectiveness of the education system, the levels of decision making are shifted to

those people who are close to the school management and should be best informed to make the best decisions. The allocation of the government grants to schools through the system of bulk funding was therefore introduced. This system provides schools with local responsibility and greater flexibility, which in turn enables schools to be more innovative and better adaptable to changes in the modern society. From this perspective, schools are operating in a competitive marketplace which is subject to performance measurement[7], self-review and customer choice.

To account for autonomous decision making involving management of the school resources, the regime of financial reporting in the school sector started with the enactment of the Education Act 1989 and the Public Finance Act 1989. The legislative requirements include not only the audited financial statements but also the budget for income and expenditure. The Acts anticipated that annual budgets should be included in the school's statement of financial performance to demonstrate some forms of planning and performance measurements are put in place ensuring that income matches expenditure for the coming school year (Houghton, 1996). Table 1 depicts a chronology of documents associated with the education reform.

The reform also includes the abolishment of the Department of Education and the regional education boards. They were replaced by six agencies: the Ministry of Education, the Education Review Office, the NZQA, the Special Education Services, a Careers Service and an Early Childhood Development Unit.

The Ministry of Education is responsible for leading the education sector to ensure the education system works for the sector and make sure that the government policies are understood and followed and desired education outcomes are achieved. The Education Review Office inspects the schools every three years, and evaluates and reports publicly on the education and care of students in schools. The NZQA's primary function is to coordinate the administration and quality assurance of national qualifications in New Zealand. The Special Education Services provides funding to children who require special education services if they have a physical or

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[7] Schools are subject to performance measurement in student achievement which is assessed against national standard in literacy and numeracy published under section 60A(1)(ba), Education Act 1989.

intellectual impairment, or a learning or behavioural difficulty. Career Services provides information and support to people of all ages on their job, training and career path. The Early Childhood Development Unit looks after the early childhood education and it was later integrated with the Ministry of Education in 2003.

Table 1. A chronology of documents associated with education reform in New Zealand

Year	Document	Initiatives
1988	Report of the Taskforce to Review Education Administration on Administering for Excellence: Effective Administration in Education	• Decentralise administration and management at schools to promote responsiveness to client demands. • Schools have control over the available resources and are held accountable for what is achieved.
1988	Tomorrow's Schools. The Reform of Education Administration in New Zealand	• Introduce new policy whereby schools are governed by board of trustees. • Advocate a partnership between schools, parents and the community.
1989	Education Act 1989	• Delegate administrative responsibility to schools and set out the Government's national education guidelines.
1989	Public Finance Act 1989	• Provide a financial accountability mechanism for the departmental use of funds which is based on the financial reporting model of the private sector.
2004	Crown Entities Act 2004	• Clarify the powers and duties of board members in respect of the governance and operation of Crown entities, including their duty to ensure the financial responsibility of the Crown entities. • Set out reporting and accountability requirements.

Schools are reviewed by the Education Review Office on average once every three years. Reviews are carried out more frequently where the performance of a school is poor and there are risks to the education and safety of the students. The Education Review Office reports go to the school boards of trustees and to the government, and the reports are also publicly available on the Education Review Office website. The

reports focus on educational improvement, student achievement and quality of teaching. The review of schools' financial management is very limited.

2.3.2 Financial Management in the School Sector

The decentralisation of the education administration system brought the concept of self-managing schools. Caldwell (2005, p. 2) explains, "A self-managing school was initially conceived as a school in a system of education to which there has been decentralized a significant amount of authority and responsibility within a centrally determined framework of goals, standards and accountabilities." The policy that underpinned the self-managing schools has shifted the responsibility and accountability to the school levels. It empowers schools to have a significant degree of control over financial resources for which accountability is being sought.

With the introduction of *Tomorrow's Schools*, the school boards of trustees are empowered with the running and management of schools. These self-managing schools are mandatory to meet the accountability requirements as stipulated in the Education Act 1989 and the Public Finance Act 1989. The principals, designated as the chief executive officers as stipulated in the Crown Entities Act 2004, are ultimately responsible for all decisions made and accountable for the outcome of all actions. Section 87 of the Education Act 1989 requires the school, as a Crown entity, to prepare annual financial statements in accordance with generally accepted accounting practice. Section 87B of the Education Act also requires the Ministry of Education to submit a report on the performance of the school sector in terms of outputs and educational achievement.

The Ministry of Education (2007a) publishes a *Financial Information for Schools Handbook* which is a reference guide for school trustees, principals and administrators to financial management best practice in schools. The handbook states:

Financial management is crucial to the health of a school, in terms of providing adequate funding for day-to-day needs and in planning for the future. Lapses in financial management, or deliberate fraud, will divert the attention of staff and trustees and may cause a reduction in the funds available for curriculum delivery. It is an unfortunate fact that problems with a school's financial management almost always impact on the education being provided to students. (pp. 2–3)

Section 75 of the Education Act 1989 charges the school's Board with the power to control the management of the school. Section 66 of the Act allows the school's Board to delegate its powers or functions to its employees or committees. Generally, a Finance Committee is established to monitor the financial management of the school. The Ministry of Education emphasises the importance of *internal control* in schools. The Financial Information for Schools Handbook defines internal control as "the set of policies, procedures and systems an organisation uses to safeguard its resources" (p. 3). The internal control system includes the implementation of financial policy to safeguard the school resources, the delegation of authority and responsibility to school employees, and the segregation of duties.

Besides the internal control system, the Financial Information for Schools Handbook stresses the importance of good management which requires planning. The Ministry of Education requires the schools to include both the strategic and operational planning in their charter. The charter describes a school's strategic plan, and goals and targets for student outcomes. To achieve these, financial planning is essential to ensure the school resources are allocated in an effective manner. The task of budgeting also fulfils the function of resource allocation.

With a budget put in place, the next step is to monitor the school's performance whether it is on track towards achieving its goals and targets. In the absence of performance indicators, monitoring a school's performance would be difficult. The *Financial Information for Schools Handbook* provides generic guidance as to how the financial performance of a school is measured from the Statement of Financial Performance and the Statement of Financial Position.

From the Statement of Financial Performance, the areas that need to be reviewed are:

- net operating surplus/deficit;

- comparing budget and actual for revenue and expenditure; and

- comparing current year actual revenue and expenditure to previous years.

From the Statement of Financial Position, the areas required for a review are:

- cash and investments;

- working capital; and

- ratio analysis in terms of efficiency, adequacy and financial trends.

Schools are required to produce an audited annual report under the Education Act 1989, the Crown Entities Act 2004, and the Financial Reporting Act 1993. The content of the annual report includes:

- Statement of Responsibility

- Statement of Accounting Policies

- Statement of Financial Position

- Statement of Movements in Equity

- Statement of Financial Performance

- Statement of Cashflow (if applicable)

- Notes to the Financial Statements

- Statement of Contingencies

- Statement of Commitments

- Analysis of Variance

- Name of all the Board's trustees and the date on which each trustee goes out of office

- A report on remuneration paid to principals and cessation payments to trustees and employees

- Auditor's Report

Boards may also choose to present the following additional information:

- Board Chairperson's Report

- Principal's Report
- Statement of Resources
- Performance Graphs

Schools are no longer required to prepare the Statement of Service Performance. Instead an Analysis of Variance between the school's performance and its stated aims, objectives, goals and targets set out in the school charter is legislatively required. Model financial statements are provided by the Ministry of Education. The boards of trustees are encouraged to use these models as a basis for the preparation of their school's annual financial statements. These models are illustrated in Appendices 1, 2 and 3.

The issues of accountability and resource allocation are the two challenges that each school is required to meet in line with its goals as set out in its charter (Hales, 1990). The charter should reflect the objectives of the Ministry and the goals of the school that all students shall achieve their standards of excellence and reach their full potential to meet national standard.

Hales (1990) suggests that the following statements which are required by the public sector accounting concepts should be further reported on the performance of the schools:

- Statement of Objectives
- Statement of Service Performance
- Statement of Cost of Services

Hales recommends schools to select a number of objectives that are concise and focused. The Statement of Service Performance then follows to describe how well the school has achieved its objectives in terms of achievements. The Statement of Cost of Services should address the output of a school in the areas of curricular activities, extra-curricular activities, administration, trading and property management. The categories of output could be varied among schools of different sizes.

Obviously, the model financial statements recommended by the Ministry fail to address the Statement of Objectives, Statement of Service Performance and Statement of Cost of Services. It would be a challenge to the schools relating how their performance could be measured in the absence of any key performance indicators. To be accountable for spending public money on delivering public service of education, schools should disclose their performance measurement system on their annual report providing various stakeholders with points of reference for quality comparison among schools. The next section discusses the phenomenon of self-managing schools and public accountability in the school sector.

2.3.3   Self-management at Schools

The intent of education reform places emphasis on self-management whereby schools are more responsive to educational needs and take greater accountability for public resources that would help increase students' achievement. It is contended that self-management at schools also involves interactions between governance and management (Wohlstetter & Odden, 1992). A study conducted by Lawler (1986) concludes that decentralised management works when four components are decentralised to the service delivery or service production unit: power (i.e. authority over budget and personnel), knowledge (i.e. skills and knowledge needed to engage in high-involvement management), information (i.e. data about the performance of the organisation), and rewards (i.e. performance-based compensation structure) (as cited in Wohlstetter & Odden, 1992).

Devolution of financial management to individual schools has become a central and complex aspect of effective school management. If it is argued that the rhetoric of decentralised decision making enhances the quality, effectiveness and responsiveness of educational needs, participation in making resource allocation decisions would be a challenging area. The Principal has the delegated power to manage the school and its financial resources. The question hence is whether there is a shift of power beyond the Principal to the school's management team to make the most appropriate financial decision making.

The control mechanisms before the education reform are replaced by a compliance regime such as: school charter, national curriculum, National Education Guidelines, National Administration Guidelines, educational reviews and financial audits. This compliance regime clearly spells out defined responsibility areas and public accountability, and the school leaders are held accountable for their actions. In this respect, schools themselves were structured into an efficient and effective business unit to meet the demands of the marketplace (Fitzgerald, 2009) under the leadership of a Principal. These structures included a hierarchy of management levels: a senior management team including the Principal and Associate/Deputy Principal, and a middle management including Heads of Faculty, Heads of Department and Heads of Learning Area. The senior management and the middle management work together to achieve the school's strategic goals and meet the national education objectives. Fitzgerald (2009, p. 53) describes this structure and ideology as "a corporate style of bureaucracy with a concomitant focus on targets, outputs efficiencies and the effective management of resources."

Public accountability for performance provides schools with great control over financial resources while achieving educational objectives (Tooley & Guthrie, 2007). Coy and Dixon (2004, p. 81) define public accountability as "the reporting of comprehensive information about the condition, performance, activities and progress to all those with social, economic and political interests." The statutory compliance under the Education Act 1989 and the Public Finance Act 1989 is significantly evident in the context of the financial management and reporting regime prevailing in the school sector. The Crown Entities Act 2004 sets out reporting and accountability requirements in terms of the governance and operation of schools. The requirements of financial planning including budgets, audited financial statements based on accrual accounting, and non-financial performance information presented in the school annual report are therefore mandatory.

School annual reporting is the primary accessible avenue to account for performance management to the public resources. The Public Finance Act 1989 requires each school to present annual financial statements with budget figures comparing the current and the previous year's performance for self-evaluation.

Prior to the education reform, schools had not taken full responsibility for educational administration, financial management and strategic planning. During the transition period, schools experienced pressures on their legislative responsibilities for administration, governance, management and legal compliance (Fancy, 2004). Research studies pioneered by the New Zealand Council for Educational Research have identified a number of issues that schools are facing during the reform process; for example, financial constraints, school governance, role of school boards, and school effectiveness.

In the school context, these new accountabilities have diverted focus away from professional issues relating to teaching and student learning to managerial responsibilities. Managing public resources requires control systems in monitoring how resources are allocated, appropriated, and maintained in order to keep schools financially viable. Schools are required to develop accounting technology and financial management structures for internal and external reporting to meet the objective of accountabilities. In this sense, fundamental changes in the education reform relating to the control and management of schools involves the use of "business accounting technologies" (Tooley & Guthrie, 2003. p. 5). Likewise, the process of budgeting and resource allocation which has traditionally been a management accounting tool in the private sector is also put into practice in the operation of the school sector. Nyland and Pettersen (2004) declare that budgeting and accounting in the public sector are regarded as controlling devices rather than a means of planning and reporting. In effect, the accounting system makes public accountability visualised and regulates the leader's responsibility for public resources. At the same time, school financial performance could be evaluated by the same accounting information.

Schools could be viewed as a collection of individuals whose interests are focused on teaching and student learning, characterised by organisational bureaucracy and roles fragmentation. The principle of public accountability could be interpreted differently among the team members in schools. The introduction of budgeting and accounting system to schools intends to make the team members collaborate in such a way that the communal objective could be achieved. In the school sector,

discretion of professionals has been replaced by a set of rules and controls exercised through the budgetary control system (Broadbent, Jacobs, & Laughlin, 1999).

The next section turns to discuss the roles of accounting in the new public management reform.

2.4 Roles of Accounting in Public Management Reform

Under the public management reform, the power of accounting has played a pivotal role as an instrument of change (Broadbent & Guthrie, 1992; Tooley & Guthrie, 2003). Broadbent and Guthrie develop a matrix (Figure 2) which illustrates three approaches to changes in terms of assumed power of accounting and organisational context.

		Organizational Context		
		Unimportant	Important	Very important
Assumed power of accounting to lead to change in public sector	Very powerful	Technical accounting		
	Powerful		Technical contextual accounting	
	Questionably powerful			Contextually technical accounting

Figure 2. Approaches to change: A definition of the "alternative" literature
Source: Broadbent and Guthrie (1992, p. 7)

2.4.1 Technical Accounting

The traditional approach of the technical changes in the public sector is more concerned with the development of technical accounting which is believed to be a powerful force for change. The context in which accounting operates is not seen as important. The development of technical practices is focused on rule-based accounting standards and the creation, maintenance or change of accounting

technologies. Mayston (1992) and Miah (1991) suggested a conceptual framework for the production of accounting information. Bird and Morgan-Jones (1981) and Hyndman (1990, 1991) emphasised on user needs information. Bird and Morgan-Jones (1981) and Herzlinger and Sherman (1980) advocated fund accounting. The construction of these technical practices is argued to be necessary as they could provide information both financial and non-financial for decision making, control and accountability.

Accounting standards were traditionally developed under the notion of profit-making in the domain of the private sector. Likewise, accounting provides relevant, understandable, reliable and comparable information to users for making economic decisions. As far as the public sector is concerned, public organisations are operating under the principles of rationality, equity and accountability which are not prevailing in the private sector. Accounting practices such as fund accounting developed for the not-for-profit organisations may help to fulfil such objectives as rationality, equity and accountability.

2.4.2   Technically Contextual Accounting

Apart from developing technical accounting practices, new accounting technologies are structured to fit accounting into its organisational context which changes over time. The new accounting technologies are the processes and systems which form the integral parts of the organisational structure. Gray and Jenkins (1986) provide an overview of the implications of the Financial Management Initiative (FMI) in British central government. The study revisits the history of the introduction of the FMI. They conclude that the policy of accountable management is not a policy in its own right. Good management should be associated with other policies which provide a framework for the administration of central government. For example, attention to cash control has been increased at the expense of other issues such as strategic management and accountability itself.

Gray and Haslam (1990) examine the external reporting by UK universities over a period of five accounting years from 1982/3 to 1986/7. They declare that university

reporting underwent considerable change over the period of study in order to meet the regulatory compliance. They conclude that the change of reporting in the tertiary sector is driven by policy prescription rather than by user demand. Hence, Gray and Haslam suggest that further study on the contents of the university annual reports through the use of content analysis may provide answers to various issues in response to environmental prompts.

2.4.3   Contextually Technical Accounting

In moving away from the traditional concern with the technical aspects of accounting, contextually technical accounting is concerned with the way in which accounting impacts on the organisation as a whole. This is based on the belief that any changes to organisational structures and processes will inevitability have impacts on accountings. Studying the whole organisation in its context will provide understandings of the change and the resultant accountings.

Miller (1990) is concerned with the interrelations between accounting and the state. He examines their interrelations through a theoretical framework based on two aspects. The first aspect is *political rationalities* which set out the objects and objectives of government. The second aspect is *technologies* which are the range of calculations, procedures and tools that materialise and visualise processes and activities. He contends that these two aspects of government are linked in a relationship of reciprocity. The political rationalities allow congruences to be established between the roles of accounting and the objectives of government. Miller suggests that further studies of the interrelations between accounting and the state may be helpful to understand how specific state projects influence the nature and direction of accounting change.

Arnold (1991) examines the interaction between government, industry and accounting policy through a study of the consequences of merger and acquisition accounting in the US hospital industry. The study provides both statistical and historical analysis of the US hospital industry. Arnold concludes that merger and acquisition accounting has created incentives that contribute to the emergence of the

investor-owned hospital corporation. She argues that the accounting literature has neglected the role of state policy in capitalist economies.

A recent study undertaken by Samkin and Schneider (2010) examine how the Department of Conservation (DOC) in New Zealand used formal accountability mechanisms and informal reporting to justify its existence. It studied the narrative disclosures contained in the annual reports, including the Statement of Service Performance, over a period of ten years spanning from its establishment in 1987 to June 2006. The DOC used assertive and defensive impression management techniques to gain, maintain and repair its organisational legitimacy for its vision to protect and restore New Zealand's natural heritage. The study concluded that the annual report of a public benefit entity could play an important legitimising role.

2.4.4   Studying Accounting in its Context

All in all, over the past two decades, the study of accounting has been shifted from a technical perspective to a contextual perspective. Importantly, more attention has been given to the issues of accounting change in the public sector: how the forms that accounting takes and the ways in which it functions are influenced, and how accounting influences the wider functioning of organisations in its social settings.

The new public management reform highlights the adoption of private sector accounting such as accrual accounting, historical cost basis and generally accepted accounting practice. It is believed that accrual accounting would enhance public sector financial management and control, and make the process of corporatisation and privatisation easy (Thompson, 2001). Financial performance indicators employed in the private sector have played a significant role in measuring the performance of governmental organisations (Jansen, 2008).

Traditionally, performance measurement is mainly focused on inputs: budgets are set for certain programmes to meet the organisational objectives. Performance is then measured against variances between these budgets and the actual expenses. With the new public management reform put in place, the financial performance

indicators have been broadened to incorporate outputs and results which are customer-oriented. Whether the public organisations are selling goods or providing services, they are operated in a business-like structure. Operational targets are set and organisational performance is evaluated in terms of outputs and efficiency.

This section explores how accounting is used as a powerful technical instrument of change, especially in the public sector. The education reform introduces the self-managing schools which start using accounting technologies in the practices of financial management. Accounting interacts with its organisational context. It is suggested that studying accounting should take its surrounding social settings into consideration for a better understanding of the issues identified. The next section discusses the issues of performance measurement and accountability in the public sector where accounting technologies are used to produce financial and non-financial information to fulfil the statutory responsibilities.

2.5 Performance Measurement and Accountability

There are three key reasons for measuring performance within an organisation of the public sector. Firstly, it forms the platform to control the public expenditure; secondly, it provides information to improve its performance; and thirdly, it forms the basis to discharge the duty of accountability (Carter, Klein, & Day, 1992; Hyndman & Anderson, 1997). Following on from this argument, it can be used to justify re-distribution of resources in order to achieve the best possible performance within the limited resources available.

Under a traditional production model consisting of three stages: inputs, outputs and results (see Figure 3), an organisation can measure its performance in terms of efficiency and effectiveness (Hyndman & Anderson, 1997, 1998). Hyndman and Anderson (1997) define effectiveness as the evaluation of an organisation's outputs or results against the organisational objectives and targets, while efficiency is measured as a percentage of outputs to inputs. Hyndman and Anderson (1997) highlight that both terms are generally used for comparison purpose, not used in absolute description for the reporting purpose.
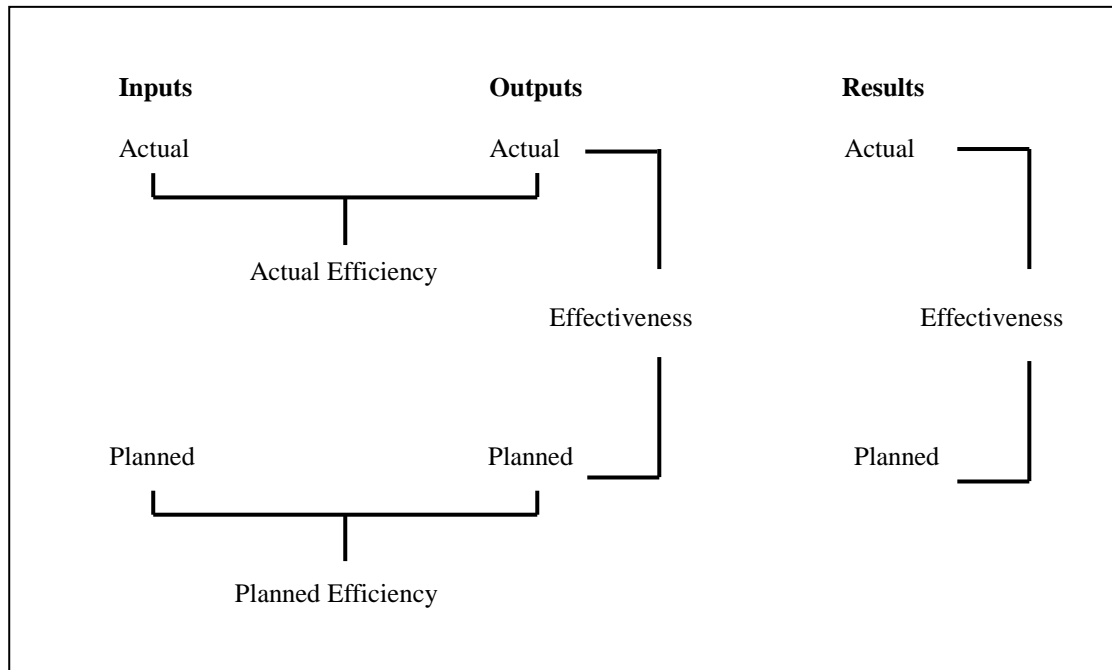
Figure 3. Performance model

Source: Hyndman and Anderson (1997, p. 141)

In a for-profit organisation, efficiency and effectiveness are commonly defined in monetary terms to measure its profitability. For a not-for-profit organisation, it is difficult to measure its performance in the absence of a profit objective (Hyndman & Anderson, 1997). Hence, Hyndman and Anderson support McSweeney's (1988) argument that this approach has inherent problems, particularly in the context of accountability in the public sector. In discussing value-for-money audits, McSweeney examines a number of difficulties which include: the lack of a direct link between intentions and outcomes, the difficulty of identifying reliable output data, and the lack of qualitative criteria for performance comparison.

Comparable ideas are asserted by a number of writers. Patton (1992, p. 175) suggests "Financial reporting is the most efficient and effective means of achieving accountability." Mayston (1992) and Jones (1992) demand a conceptual framework for reporting in the public sector with a view to meeting the user needs. The main themes of these writings have focused on the purposes of financial reporting and user needs (Hyndman & Anderson, 1998).

In a public organisation like a school, one may bring into question to whom a school is accountable. Hyndman and Anderson (1998) identify three groups as primary users of a public sector organisation: the public, oversight bodies, and investors and creditors. Similar lists have been provided by other studies like Bird and Morgan-Jones (1981). The information needs of each group of users may be different (Hyndman & Anderson, 1998; Patton, 1992). For example, the public and the oversight bodies may be interested in the results and outcomes which measure the effectiveness of the organisation. Investors and creditors may be interested in the financial information relating to solvency. In a wider sense, a public organisation is accountable to all external users, which includes providers of resources.

Stewart (1984) suggests two forms of accountability: "performance accountability" and "accountability for probity and legality". Patton (1992) advocates "service accountability" and "legal accountability". Hyndman and Anderson (1998) argue that an accountability information system should report on all forms of accountability in terms of both financial and non-financial information which support output and outcome measures.

There have been discussions whether financial or non-financial information fulfils the role of accountability.[8] Hyndman and Anderson (1998) argue that there is a propensity to over-emphasise financial information at the expense of wider performance reporting in the discharge of accountability. Hence in supporting Mayston (1985) and Miah (1991), Hyndman and Anderson (1998) call for reporting performance information on efficiency and effectiveness for a public organisation to discharge the duty of accountability. Miah (1991) remarks, "there has been a major shift in the views of public sector accounting from fiduciary stewardship towards performance-based accountability" (p. 95).

In a study of management accounting practices in non-profit organisations, Ashford (1989, p. 36) identifies that "output measurement is extremely difficult" in not-for-profit organisations including schools as "measurement of outcome or efficiency can only take place at a numeric (non-monetary) or qualitative level." Interestingly,

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[8] For detailed discussions on this topic, see Bird and Morgan-Jones (1981) and Hyndman (1990).

Ashford's (1989) contention echoes McSweeney's (1988) argument that performance measurement in non-profit organisations should also be based on non-financial (qualitative) information. Ashford identifies that management accounting practices exist in organisations with "regular budgeting and reporting, and some costing and evaluation" (p. 36). Ashford concludes that controls are exercised largely at board level, and the financial control is against the budget rather than the previous year's performance. Ashford also identifies that cost centre allocations which are needed for performance measurement are widely used in the organisations under study.

Furthermore, Ashford's (1989) study indicates that budgeting assists the organisations in decision making as to how resources are allocated. In Ashford's study, the nine purposes for budgets are ranked: control spending, planning, control income, co-ordination, pricing, setting standards, performance evaluation, motivation and donors. The high ranking of control and monitoring is consistent with the purposes of the organisations which seek to achieve objectives within the allocated funds. Ashford explains that the low ranking of performance measurement may be due to the difficulty of measurement in financial terms and the lack of resources. However, the most common techniques in evaluating performance are output measures and budget performance. In terms of performance indicators, *cash flow* and *liquidity* analysis are often used, though by a minority of organisations. The unit cost information is hardly reported by the organisations. Ashford explains that it may be due to the cost incurred in calculation and the lack of usefulness of the cost information to the users.

Conclusively, Ashford (1989) recommends that output measures should be reported against inputs (e.g. staff cost and resources) and outcomes are then measured against outputs. Similarly, Ashford's (1989) contention resonates with that of Hyndman and Anderson (1998) concerning performance measurement in terms of efficiency and effectiveness. Not surprisingly, the guidelines provided in the *Financial Information for Schools Handbook* follows the academia's recommendations that are mentioned above. The next section turns to examine the performance indicators in the public sector.

2.6   Performance Indicators

Performance measurement cannot happen in a vacuum. Performance can only be measured against preset indicators or targets. In addressing performance measurement in universities, Higgins (1989) defines a performance indicator as "a statement, usually quantified, on resources employed and achievements secured in areas relevant to the particular objectives of the enterprise" (p. 362). Higgins explains that performance indicators must:

- relate to objectives;
- be specific, quantifiable and standardised;
- be as simple as possible;
- be acceptable and credible (absence of systematic bias); and
- be capable of acting as signposts to areas needing attention.

Higgins also classifies the performance indicators into internal, external and operating. Examples of internal performance indicators in a university could be graduation rate and the teaching quality; external performance indicators may be publications by staff and reputation judged by external reviews; operating performance indicators could be unit costs and teacher-to-student ratio.

In discussing the use of performance indicators to hold schools accountable, Ogawa and Collom (2000) suggest that educational indicators are viewed as "being capable of more than simply describing problems; they came to be seen as tools of reform and improvement" (p. 201). Ogawa and Collom identify five uses of educational indicators: to describe, to advance policy agenda, to serve as the basis for accountability, to evaluate policies and programmes, and to serve as information management systems. They consider that the uses of educational indicators to describe and to advance policy agenda are more concerned with political process, thus they have relatively lower stakes than the remaining three uses from the school management perspective.

To address the issue of accountability, Ogawa and Collom (2000) point out that the educational accountability system creates "market-like conditions" in which schools

are motivated to improve "internal operations to enhance their effectiveness and efficiency" (p. 207). To do so, schools seek performance monitoring tools such as performance indicators or targets in order to achieve the outcome measures. However, policymakers need to caution that narrow sets of standardised performance indicators which provide them with information to hold schools accountable for their performance could be "corrupted" by manipulation (Oakes, 1989; Ogawa and Collom, 2000).

McSweeney (1988) identifies two problems that exist with the use of performance indicator league tables by the Audit Committee for Local Authorities in England and Wales: comparability and manipulation. The non-uniform input data makes comparability inconsistent and inaccurate; the issue of manipulation could take various forms such as smoothing, biasing, filtering and focusing. McSweeney emphasises that "the greater the use of performance indicators for evaluation, the greater the incentives to manipulate" (p. 37). Mortimore (1990) warns that performance indicators tend "to be concentrated on what is readily observable so that less tangible but equally important components of education quality are ignored" (p. 90). Nevertheless, the benefits of performance indicators "far outweigh the risks of including them" as they help policymakers focus on problems and seek ways to improve school performance (Oakes, 1989, p. 182). For the schools themselves, appropriate measures in terms of performance indicators make them "more comprehensible and more knowledgeable" to differentiate themselves in effectiveness and efficiencies (Climaco, 1992, p. 297).

In a similar vein, Pugh, Coates, and Adnett (2005) and Smith (1993) identify four underlying reasons for the introduction of performance indicators in education. First, policymakers desire to hold educational institutions accountable for their performance for addressing the principal-agent problems. Given the information of performance indicators, principals are better informed about the behaviours of their agents for evaluating equitable allocation of resources by measuring the performance of budget management. The performance indicators should, therefore, reflect the government's educational objectives and performance outcomes made by individual agents. Second, performance indicators assist to inform the policy initiatives and the budgetary allocations. Third, performance indicators can be used

by external users to make better-informed education choices. This stimulates competition through comparison and benchmarking. The fact that parents and students have their freedom to choose the better performers increases pressures on those low performers to raise their level of measured performance and outcomes. Finally, performance indicators provide the agents an incentive to compete for students and for centrally allocated funds to create and publicise their own performance indicators. It is cautioned that the agents may selectively disseminate their current favourable performance, rather than generate incentives for future improved performance. As such, a single system of cross-sector performance monitoring is necessary. These reasons are primarily intended for external authorities in exercising control and monitoring.

Smith (1993) adds two reasons for setting outcome-related performance indicators for the benefits of internal control: (1) clarifying the objectives of the organisation, and (2) improving the production process. Smith continues to argue that most organisations in the public sector are under a very imperfect external control mechanism in which individuals have very little incentive to scrutinise the performance of the public sector organisations, or to pay others to do so. In the private production markets, perfect competition competes for timely information enabling the investors to exercise their voluntary choices in favour of the best performers. In contrast, the public sector organisations are subject to different organisational objectives, different social and economic environments, different accounting records and different management efficiencies. The individual users have to disentangle and understand these variables before a decision is made. The costs of scrutinising the information far exceed the potential benefits from the individual user's point of view, even though the whole community may benefit from such scrutiny. This argument gives rise to the need for an intermediary acting on behalf of the community. In New Zealand, the Ministry of Education fulfils this role in the school sector.

In discussing the challenges of performance evaluation of the public sector, Jackson (1993) declares that performance measurement is a control mechanism, and continuous improvement is achieved through benchmarking against some targets or indicators. Jackson further comments that public service organisations are complex,

as they exist in a dynamic socio-political environment. They deliver services to the clients in line with the policies, and they are accountable to a diversity of stakeholders. Their performance tends to be judged in a way that is values driven which requires a wider range of performance measurement techniques than their private sector counterparts. Accordingly, Jackson advocates the use of a strategic management approach in designing performance measures. This approach includes not only the traditional financial information but also non-financial information such as environmental and social responsibilities. The performance indicators should be long-term incentives and values driven to provide information for continuous improvement.

In past decades, educational studies have been more concerned with the student achievement outcomes, such as examination and test results, attendance, retention rate, post-school employment, and the quality of learning and teaching. Using these performance indicators in the education sector, Mortimore (1990) discusses the complexities of measuring education quality because of lack of self-evaluation techniques. Morris (1994) provides evidence that Catholic schools achieve better results than other Local Education Authorities maintained schools. Morris suggests Catholic schools serve a more specific and coherent community that is characterised by a common morality, a uniform value system and an appreciation of legitimate authority. McGlynn and Stalker (1995) stress the importance of keeping quality in education.

In the broad sense, performance indicators, whether internal, external or operating, provide measures of accountability for results and resources to the public and to the providers of funds. Measuring and reporting on performance will make the public sector more accountable, and stimulate the sector for better management and performance improvement (Hyndman & Anderson, 1998). Without the building-blocks of well-designed performance indicators, both financial and non-financial, the roles of performance measurement in the school sector could be unclear. The next section describes budgeting and its roles in organisations and schools alike.

2.7 Budgeting in Organisations

Budgeting has been developed since the 20th century in the function of modern industrial societies. Budgeting systems are suggested to support and promote rational decision making, particularly on allocating scarce resources. Under the complex and dynamic environments confronting organisations, budgeting is used as a technical mechanism for "coping with an objective world and to rationally foster efficiency, order, and stability" (Covaleski, Dirsmith, & Jablonsky, 1985, p. 278). A budget has become a financial plan to control future operations in order to keep performance within the acceptable limits of the predetermined plan (Becker & Green, 1962). An ideal budgetary system would have a controlling system to increase profit and to facilitate coordination by forecasting accurate results (Dunbar, 1971). It is not surprising to find that budgeting is pervasively used in the manufacturing function of profit-oriented organisations.

Lately, budgeting has become a mandatory exercise in the public sector. At the outset, budgeting serves the dual purposes of control over public money and accountability to pubic authorities. A set budget provides a blueprint for planning and forecasting, which is a prerequisite for the sustainability of a public organisation. Within a set of budget, upper limit is imposed on the objects of expenditure, and the levels of authorisation to spend are documented. To satisfy the duty of accountability, prior to payment claims it is ensured that (1) a budget document is provided for such expenditures, (2) sufficient funds are available, and (3) necessary documents are presented to support the claim. When the limit is reached, spending is stopped. Becker and Green (1962) consider this type of control as a *restraint control*. Staples and Rubin (1997) describe budget management as a process of regulating expenditures ensuring they are within the authorised amounts and for the designated purposes.

2.7.1 Roles of Budgeting

Traditionally, budgeting has been regarded as a management tool for resource allocation, forecasting, planning and control for the purpose of achieving

organisational objectives (Cherrington & Cherrington, 1973; Covaleski & Dirsmith, 1986; Hanson, 1966; Lyne, 1988; Skousen, 1990). A budget is a financial planning process which starts from setting goals on cost and revenue for activity units within an organisation to controlling, communicating and evaluating performance on these budgeted goals (Kenis, 1979). Top-down communication of budgeted goals informs the lower management about the top management's expectation on them; bottom-up communication provides the top management with budget information that helps evaluate the performance of lower management. These human relations inherent in this budgetary control function may create pressure or tension between top management and their subordinates.

2.7.1.1   Budget as Resource Allocation, Forecasting and Controlling

The purposes of budgeting, such as resource allocation, forecasting and controlling, should be viewed as an intermingled control mechanism of financial management. In the public sector, education is a significant expenditure and it requires a set budget to determine how the limited amount of resources is allocated to schools in terms of predictability and planning – knowing how much to spend over time for the current year. Spending within the budget is continuously monitored to ensure the funds are authorised and appropriately spent for the designated activities and purposes.

The objective of controlling is to ensure that the activities are carried out according to plans with a minimal deviation from the budget. Variances from the budget should be provided with explanation, and corrective actions then follow. Hanson (1966, p. 240) identifies three intangible attributes of control which may reduce divergences between actual performance and desired performance:

- the nature of authority and the budget;
- the degree of employee identification with budget goals; and
- the degree of attainability of budget goals.

In discussing the purposes of traditional budgeting, Wildavsky (1978, p. 501) highlights that "budgeting is supposed to contribute to continuity (for planning), to change (for policy evaluation), to flexibility (for the economy), and to provide rigidity (for limiting spending)." Wildavsky argues that these purposes could not be satisfied simultaneously, but the characteristics of the budgetary process suit varied purposes under different conditions.

Budgets are made by people for guiding their plans of action and measuring their performance. Based on this notion of behavioural budgeting, budgets cannot be analysed from an accounting standpoint only; human behavioural factors should be taken into consideration (Cherrington & Cherrington, 1973; Milani, 1975). In the business world, the concept of a budget varies from organisation to organisation. In a for-profit organisation, a budget is used for comparing actual results with the estimate and analysing the differences between them for the purpose of performance improvement. In a not-for-profit organisation, a budget is primarily used for resource allocation and planning. In a study of budgetary control and reward contingencies on performance and satisfaction, Cherrington and Cherrington identify the style of an organisation's budget and its effect which include: the type of organisation, the leadership style, personalities of people affected by the budget, the method of preparation, and the desired results of the budgeting process. These factors are entirely related to human reactions which determine the roles of a budget and its effectiveness.

The literature suggests that a budget "is prepared by people, revised by people, and its requirements must be met by people" (Beddingfield, 1969, p. 54). The budget is an instrument which cannot exist without people, and therefore it could be related to functional or dysfunctional behavioural consequences (Beddingfield, 1969; Milani, 1975). The success in budgeting relies upon the level of human relations problems and the convergence of disparities between the controller–controlled relationship. Beddingfield provides a number of solutions including active participation, proper use of the budget as a control device, integration of the budget programme and the accounting system into a coordinated operation, and use of incentive programmes which appeal to the higher order needs of employees.

2.7.1.2 Participative Budgeting and Performance Measurement

It is believed that participative budgeting can lead to better performance. Before achieving this, the human relation problems in the budgetary process need to be solved first. The most frequently suggested solution may be active participation in the preparation of the budget by those people who will be affected (Beddingfield, 1969). Participation is defined as "a process of joint decision making by two or more parties in which the decisions have future effects on those making them" (Becker & Green, 1962; Beddingfield, 1969). Becker and Green describe the process of participation as a function of the *act* of participating and the *content* of participating. The act of participating enables the participants to communicate and interact with one another leading to increased cohesiveness. The content of participating should be directed to goal congruence that is accepted by participants in the group. The success of budgetary participation requires the fulfilment of these two conditions (Becker & Green, 1962).

Defining the nature of budgetary participation as an epistemological problem, Milani (1975) suggests the participation–nonparticipation dichotomy, and hence the participation–nonparticipation continuum. The participation–nonparticipation continuum determines the extent of involvement in the budget setting process. In a similar vein, one more condition, i.e. *amount*, could be added to the function of budgetary participation. In totality, the budgetary participation is a function of the *act* of participating, the *content* of participating and the *amount* of participating. It is of interest to examine how much budgetary participation is undertaken in schools.

At this point, it should be emphasised that the amount of participation, whether *active* or *pseudo*, is associated with the managerial leadership style. Brownell (1982) concludes that a budget-focused leadership style is most effective under high participation, and is ineffective where participation is low. From a different vantage point, Ronen and Livingstone (1975) argue that the effectiveness of participative budgeting depends on the level of group cohesiveness which could be considered as a collection of individuals' aspirations. As such, they suggest that a more

authoritarian managerial style will be more effective in raising the aspiration levels of individuals in the group.

Empirical studies have been undertaken to examine the relationship between budgetary participation and performance mainly in the manufacturing environment. Most interestingly, conflicting results were reported among studies ranging from a strong positive relationship to a weak negative relationship. A field study conducted by Milani (1975) revealed that participation in budget setting weakly supported performance, but it generated a better attitude towards an individual's job. Contrastingly, Brownell and McInnes (1986) found that participation and managerial performance were significantly and positively related.

In a study of 28 plant managers in an organisation, Kenis (1979) concludes that budgetary participation and budget goal clarity have positive and significant effects on job-related and budget-related attitudes and performance of managers. Kenis continues to highlight that the budgeting style of upper managers affects the attitudes, behaviour, and performance of lower managers. In a similar vein to Kenis, Dunk (1990) and Skousen (1990) advocate participative budgeting which facilitates managerial performance through two-way interaction between participation and agreement on evaluation criteria which affects performance. Through a study of 13 medium or large UK companies, Lyne (1988) also concludes that there is a desire to have increased participation in the process of budget setting.

Participative budgeting could, however, bring dysfunctional behaviour to an organisation. During the process of budget setting, "managers negotiate slack budgets in response to participation's reinforcement of the expectation of formal rewards being based on attaining budget" (Brownell & McInnes, 1986, p. 597). Brownell and McInnes argue that participation in the budget setting provides an opportunity for managers to negotiate a more easily attainable budget than would be set otherwise. Onsi (1973) found that 80 percent of the managers under study negotiated for slack to provide a hedge against uncertainty. Young (1985) also concludes that managers who participated in the budget setting built in slack which was positively associated with the level of uncertainty.

Schiff and Lewin (1970) assume that the participants in an organisation are passive members within the controller–controlled relationship. They believe that only participative budgeting could maximise organisational effectiveness and individual satisfaction. Individuals in an organisation seek to achieve both personal goals and organisational objectives. Schiff and Lewin warn that it does not always guarantee a consistency between the individual's goals and the organisational objectives. The individuals are, therefore, motivated to align their personal goals with the organisational objectives through the use of participative budgeting. These budgets are in turn formulated as the standards to measure the individual's performance. This participative budgeting will ultimately "serve as a mutually agreed upon control device for monitoring the activities of the various sub-units" in an organisation (Schiff & Lewin, 1970, p. 261).

Schiff and Lewin (1970) also observe that divisional managers exercise discretionary budgetary allocations which include personnel positions. These positions would not be filled under adverse conditions, thus the savings in budgeted salaries would appear to increase net income. This suggests that managers attempt to avoid uncertainties through the creation of slack. Schiff and Lewin state that this form of slack "can be a major problem for top management and can be viewed as representing lost opportunities to the firm and in the long run increasing its cost function" (p. 265). They suggest a reward structure which is objective and places equal emphasis on over-achieving and under-achieving. To achieve this, top management should evaluate and review the budget throughout the budget preparation process. Furthermore, involvement of the top management in the budgetary process could counteract the tendency to create slack and force the managers to rethink their long-standing assumptions in budget setting.

Despite the criticisms of participative budgeting, Argyris (1955) summarises that participative management can:

- increase the degree of cohesiveness that participants have with their organisation;

- provide the participants with a wider organisational point of view instead of a narrow departmental point of view;

- decrease the amount of conflict and competition among the participants;

- increase the mutual understanding of each other;

- increase the degree of loyalty of the participants; and

- increase the amount of creative ideas beneficial to the organisation.

Argyris (1955, p. 1) contends that "the subordinates should be given an opportunity to participate in the various decisions that are made in their organization which affect them directly or indirectly."

2.7.1.3   Political Use of Budgets

Covaleski and Dirsmith (1986) suggest that the resource allocation decision during the process of budgeting may be viewed as a political process to "establish, distribute and maintain power within organizations" (p. 194). This perspective claims that the organisational budgeting process enhances its potency by "rationalizing and legitimating symbolic, ritualistic acts" (Covaleski & Dirsmith, 1986, p. 210). In a political environment, budgeting is criticised as a ritual that gives the actions of leaders legitimacy and provides the participants with opportunities for negotiations. The object of the budgetary process is considered to be control rather than steering (Jonsson, 1982). Jonsson continues that budgeting is like a short-term hedging exercise against unanticipated events; budgeting is not, as expected, to direct an organisation to achieve its goals. The ritualistic type of control is salient when there is low availability of output measures (Ouchi, 1977).

As far as resource allocation is concerned, it is theorised that budgeting systems should reflect and promote rationality in decision making (Covaleski et al., 1985). The decision makers would find ways to safeguard the public resources and to minimise the uncertainties. Most often the last year's budget will be used as a base to scrutinise the incremental budget amount requested (Jonsson, 1982). *Advocates* (controlled) justify their request for more expenditure to provide better service; whereas *guardians* (controller) persist in curbing expenditure. These confrontations

create instability between roles in the budgetary process, but such conflicts last temporarily. These actors in the budgetary process interact, ally and together establish a sophisticated network to achieve the desired outcome. Hence, Jonsson describes this budgetary process as "a multitude of rationalities at play" (p. 287).

According to this position, budgeting acts as a source of power serving the needs of the "budgeters" (guardians) and the "budgetees" (advocates) through a series of negotiation processes. It follows that Burchell, Clubb, Hopwood, Hughes, and Nahapiet (1980, p. 17) recommend the study of budgeting as a mechanism within which "interests are negotiated, counter claims articulated and political processes explicated." It comes to a conclusion that "budgeting can be used to establish and maintain power in the sense that it shifts decision-making discretion from human service providers to technocrats" (Cavaleski et al., 1985, p. 296).

Cavaleski et al. (1985) continue to stress:

> *Budgeting was there, a fact of life to be accepted and taken for granted.… It holds that budgeting is implicit in the process by which the society flows through and changes the organization, thereby creating the organization's reality.* (p. 296)

Burchell et al. (1980) discuss the connection between power and politics and how accounting has emerged from management practice to organisational and social significance. Accounting functions as "a cohesive and influential mechanism for economic and social management" (Burchell et al., 1980, p. 6). Burchell et al. identify two tendencies to explain the changes: the increasing institutionalisation of the accounting craft and the growing objectification and abstraction of accounting knowledge.

The pervasive use of accounting information implicated in budgeting, planning and control, standard costing and resource allocation has made accounting an institutionalised profession and a standardised practice (Burchell et al., 1980). In such ways, accounting is seen as an "identifiable form of organizational and social practice" (p. 8) that promotes "corporate accountability" and "rational decision making" (Burchell et al., p. 10). Burchell et al. say that organisations are grounds in

which participants with a diversity of interests arrive to a coalition through negotiation, counter claims and power influence. Thus the functioning of an accounting system in terms of budgeting becomes an organisational and social phenomenon which could be used for a variety of purposes by a group of actors in an organisation.

Conventionally, accounting has been seen as concerned with the provision of "relevant information for decision making", with the achievement of a "rational allocation of resources" and with the maintenance of institutional "accountability" and "stewardship" (Burchell et al., 1980, p. 10). In order to promote "corporate accountability" and "rational decision making", budgeting, planning and reporting practices work together to constitute a framework within which delegation of authority can occur (Burchell et al., 1980). Burchell et al. suggest that particular interests and concerns could lead to the creation of a new accounting system which is designed to make the desirable phenomena observable and the chain of command workable.

Schools are legislatively charged with both the responsibility for advocating the educational policies and accountability for the government funding. The effectiveness and efficiency of school management is of interest to the public, particularly the taxpayers and the fund providers. The primary purpose of the budget is to translate the governmental education priorities into programmatic and financial terms in the context of available fiscal resources and legal constraints (Staples & Rubin, 1997).

In sum, regardless of the perspectives one may use to interpret a budget, the roles of a budget in an organisation are multi-faceted. Budgeting could serve many purposes other than just achieving resource allocation. Researchers should be reflexive to emergent views of budgeting that may arise out of traditional theories.

2.7.1.4   Roles of Budgeting in Schools

In the school sector, budgeting was a new management tool with the enactment of the Education Act 1989 and the Public Finance Act 1989 (Houghton, 1996). Houghton studied five primary schools in New Zealand and identified the various roles of a budget in schools, which are ranked in Table 2.

Table 2. The roles of the budget in schools

Roles of the Budget	Ranking
Resource allocation	1
Forecasting	2
Planning	3
Control	4
Attention directing	5
Motivation	6
Co-ordination	7
Communication	8
Performance evaluation	9
Authorisation function	10
Political	11

Source: Adapted from Houghton (1996, p. 39)

Obviously *resource allocation* is considered to be the most important role of budgeting in a school. This supports the findings in Williams, Macintosh, and Moore (1990) that resource allocation is the predominant role in the public sector. The roles of *forecasting*, *planning* and *control* are also considered important by schools as these roles require monitoring whether the mechanism employed in *resource allocation* operates effectively and efficiently. The roles of *performance evaluation* and *political* are, however, viewed as less important. Most interestingly, Houghton's findings support Ashford's (1989) study that performance evaluation is ranked low when it is compared with other roles such as control and planning.

Studies undertaken in the school sector to explore the uses of budgeting are very limited. This study attempts to fill the knowledge gap.

2.8 Schools' Use of Operational Funding

State schools are primarily funded by the government through the allocation of operations grants, the level of which depends on the roll, the decile[9] of the school, the year levels of students and the number of Māori immersion students (Ministry of Education, 2006). The operations grants fund the schools to meet day-to-day expenses, except teacher salaries and major capital works which are funded separately. It is widely known that schools operate on a very tight budget with the operations grant alone. Schools, therefore, attempt by other means to supplement their revenue through locally raised funds such as parent donations (monetary), sponsorships, voluntary support (non-monetary) and fund-raising activities (monetary and/or non-monetary). In addition, the revenue generated from the foreign fee-paying students contributes a significant source of income, particularly to those schools which have a comparatively high-performing reputation to attract foreign students.

In 2005, a pilot survey was carried out by the Education Review Office to investigate how schools use their operational funding. The report which is based on a detailed analysis of 218 schools[10] was published in 2006. Whilst the report provides information on the patterns of school income and expenditure and the processes used by schools to manage their operations grants and locally raised funds, it discloses that the links between financial and strategic planning, management and reporting are weak, particularly within the low decile schools which are lacking financial and strategic expertise (Education Review Office, 2006). Unfortunately,

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[9] A school's decile indicates the extent to which the school draws its students from low socio-economic communities. Decile 1 schools are the 10% of schools with the highest proportion of students from low socio-economic communities, whereas decile 10 schools are the 10% of schools with the lowest proportion of these students. A school's decile does not indicate the overall socio-economic mix of the school.

[10] During Terms 3 and 4, 2005, the Education Review Office carried out a regular education review of 218 schools (180 primary and intermediate schools and 38 secondary and composite schools).

the report did not attempt to investigate the rationale for spending discretionary income on different projects or activities.

The Education Review Office (2006) report identifies a number of factors which influence the way schools use the operations grant they received from the government. They include:

- the amount of locally raised funds they generate;
- the overhead costs associated with running their schools;
- the amount of Targeted Funding for Education Achievement (TFEA) they receive as part of their operations grant;
- their community expectations; and
- the financial and strategic capability to which schools have access.

The level of discretion the schools have over locally raised funds depends on their sources. Sponsorships and trust funds are usually designated for a specific purpose which is stipulated on the grant application. The donations from the parents or guardians and the tuition fees from foreign fee-paying students comprise almost 50 percent of the locally raised funds. The schools have full discretion to use these funds to achieve their strategic goals. Fees received from activities and trading are usually intended to cover their costs only. Examples of school activities are trips, camps, sports and the annual ball; trading activities are uniform and stationery sales, and student canteen. Table 3 shows the average percentage of locally raised funds in secondary schools by source.

Table 3. The average percentage of locally raised funds by source for secondary schools

Fundraising Source	Percentage of Fundraising
Asset / property sales	1
Whānau / guardian donations	14
Course / activity fees	8
Donations from the community	4
Hire of facilities	3
International students' tuition	32
Trading	12
Sponsorships	Less than 1
School hostels	10
Fundraising	3
Other	12
	100%

Source: Education Review Office (2006, p. 6)

The non-cash resources received from the communities could range from donation of goods such as paints and computers to voluntary assistance from parents in tutorials and supervision on camps. These types of non-monetary resources are rarely included in the schools' accounts (Education Review Office, 2006).

The Education Review Office (2006) classifies the school expenditure into two categories: overheads, and teaching and learning. They are summarised in Table 4.

Table 4. Categories of school expenditure

Overhead Costs	Learning and Teaching Costs
Administration staffing	Additional teaching staff / time
Administrative consumables	Classroom / curriculum materials
Auditing / Accounts	ICT for learning (not administration)
Board of trustee expenses	Library resources
Caretaker / Property staff	Support staff: teacher aides, librarians
Caretaking / Cleaning consumables	
Cyclical property maintenance	
Depreciation	
Insurances / ACC	
Marketing, publications, communications	
Property repairs and maintenance	
Relief teachers	
Telecommunications	
Technicians	
Utilities (power, water, rates, gas)	
Miscellaneous administration	

Source: Education Review Office (2006, p. 13)

The report identifies that schools spent on average 90 percent of the operations grant on overheads, with percentages ranging from 60 percent to 175 percent. It is evident that there is a wide variation in overhead expenditure among schools while they are making discretionary decisions.

The expenditure on learning and teaching are normally considered in the schools' budgetary process. Capital items are also included in the budget when they are necessary or need to be replaced in delivering curriculum in the classrooms. The level of spending on different learning and teaching areas depends on the schools' strategic goals and their existing infrastructure. In an attempt to improve student achievement, higher decile schools spent a substantial amount of resources on ICT, additional teachers and support staff to support student learning; whereas lower decile schools spent a lower proportion on ICT for learning (Education Review Office, 2006). The learning and teaching expenditure as a percentage of schools' operations grants ranged from 25 percent to 130 percent.

Schools, as Crown entities, are required to comply with the government goals as outlined in the National Administration Guidelines (NAGs) in terms of six areas: (1) curriculum, (2) self-review, (3) personnel, (4) financial and property management, (5) student health and safety, and (6) legislative compliance. Boards of trustees are empowered with such responsibilities under section 75 of the Education Act 1989 to monitor schools' spending, which should align with schools' strategic objectives and the government goals. This is a very complex task and it relies on the financial and strategic expertise available in the schools. The Education Review Office (2006) identified that lower decile schools were proportionally less effective in linking between financial and strategic planning, management and reporting than medium or high decile schools. They were less likely to keep good records of resource allocation and thus they are susceptible to financial problems. These lower decile schools were provided with additional operations grants to address their special needs; however, they failed to evaluate the effectiveness of their spending to address the improvement of student achievement (Education Review Office, 2006).

Operational funding is described in the Ministry of Education's *Funding, Staffing and Allowances Handbook* as:

> *... funding paid by the Ministry of Education to a school's board of trustees to run the school. Operational Funding does not include funding for the salaries of entitlement teachers, property, or large capital items. These are paid for separately.* (Ministry of Education, 2006, p. 2)

The handbook provides guidelines to the school boards in managing the operational funding by setting priorities which should meet the following requirements:

- the National Education Guideline;
- the National Administration Guideline;
- their obligations as good employers;
- any legislative and contractual requirements to which they are subject; and
- achieving the objectives specified in their charter.

The operational funding is broken down into various components: per pupil, base funding, relief teaching grant, special education grant, etc. (see Table 5). The handbook states that these funds are not 'tagged' and do not need to be accounted for individually. The only exception to this is the Secondary Tertiary Alignment Resource (STAR).[11]

Table 5. Components of school operational funding

Components	Percentage
Per pupil	57
Targeted Funding for Educational Achievement (TFEA)	11
Base funding	7
Maintenance	7
Relief teacher grant	5
Special education grant	4
Heat light water	4
Māori language	2
Targeted funding for isolation	1
Careers	1
Vandalism	1
NCEA grant	0

Source: Ministry of Education (2006)

Wylie and King (2004) undertook a longitudinal three-year study of 18 effective New Zealand schools between the period of 2000 and 2003. The findings of the study provide useful insight into the revenue and expenditure pattern within these schools. The findings can be summarised as below:

- The operational funding comprises 18–24 percent of the schools' total revenues.

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[11] The Secondary Tertiary Alignment Resource (STAR) delivers additional funds to all State secondaryschools with year 11-13 students. STAR assists boards of trustees, principals and schools to better meet the needs of students. It enables schools to help their students smoothly transition from school to further education and/or employment. There is a focus on at-risk students intending to go straight into the workforce.

- The revenue from other sources that are raised locally may vary between schools from 3 to 21 percent of the schools' total revenues.
- The net income from international students represents between 19 and 90 percent of total locally raised funds.

Wylie (1998) also identified that under the decile school ranking system, low decile schools lost students while high decile schools gained students. The loss of students in low decile schools affects the roll-based operational funding. To develop a balanced budget would be a challenge to low decile schools.

Since the components of the operational funding are not required to be accounted for individually, the school Board may have a reasonable level of discretion to prioritise the funds into certain projects or activities. The schools' discretion on spending is exercised through the budget setting process. After all "no choice" spending areas (fixed costs such as utilities and staffing) are met, the discretionary spending areas are curriculum-related, which include professional development and ICT within the strategic plans (Wylie & King, 2004). Drawing down the wish lists is a budget bidding process which pulls the management team together to arrive at a school-wide accepted target. The budget setting process formulates a network within which the participants interact with each other. The controller–controlled (budgeters and budgetees) relationship during the budgetary process sets the scene of this study.

2.9   Conclusion

Education reform was one of the outcomes of the new public management reform in the 1980s. It aimed to improve the efficiency and effectiveness of the administrative structures of the education system and raise the standard of education outcomes and the quality of education offered. The reform includes the empowerment of boards of trustees to manage schools, the decentralisation of decision making, the involvement of parents in their children's education, and the community's contribution to educational and cultural activities.

Twenty years have gone by since the education reform began in 1989. Schools now are primarily self-managed and work together with the parents and the local communities to achieve the national education objectives and the school goals. If the loss of students in low decile schools continues, it will increase financial distress on those self-managing schools which have done what they are supposed to do to attract students. Education reform could not have foreseen this phenomenon.

Continual research efforts (for example by Wylie and King, 2004, 2005) have been focused on the sources of revenue, patterns of expenditure, learning outcomes and student achievement. A self-managing school should be an effective school (Wylie, 1998). To achieve this, considerable efforts undertaken by the management staff to administer the schools, and the ways in which the resource is utilised have a major impact on effective self-management. Therefore, a well-planned budget should have important bearings on its effectiveness. To become an effective school, great attention should also be given to all aspects of financial management.

On page 49 of the Report of the Taskforce to Review Education Administration (1988), it says clearly:

> *Funding for all the institution's activities will be calculated on the basis of new nationally determined formulae, and will be sent directly to institutions as a bulk grant. Within this bulk grant, a budget will be prepared by the principal and staff – but the final responsibility for approval of the budget will lie with the board…. While the bulk grant has two distinct components, each based on its own separate funding formula, the board has some discretion in the use of these funds. It has, for instance, some leeway in the numbers of teachers it will hire, and at what rate in the salary scale it will do so.*

Under the mechanism of bulk grant, it is anticipated that school boards are autonomous to spend their money within budget. As such, a budget is a crucial financial document to justify their spending and is subject to external audit by Auditor-General. Schools employ accounting technologies to satisfy their statutory obligations in public accountability such as presenting audited financial statements, developing an annual budget, measuring financial performance against the budget, and allocating resources to meet National Administration Guidelines.

Budget execution and monitoring in the school sector have not been much examined and well understood in the research literature. Future research on the ways schools set their budgets, allocate resources and evaluate performance, and how this contributes to the effective management of the school sector is important. Hence, the study of the behaviours of the participants in the budget setting process will provide valuable insights into both the roles of the actors and understanding how the budget and the accounting system interact with the actors in its organisational context.

Drawing on the environment in which the New Zealand education system is operating, this study examines the issues surrounding the areas of (1) budget setting process, (2) budget control and monitoring, (3) resource allocation, (4) authority delegation, and (5) the role of the board of trustees. This study concerns the roles of budgeting in schools from the perspective of the stakeholders as a whole.

2.9.1   Research Questions

Consequently, this study's primary objective is to penetrate the normally unseen and inaccessible processes of budget management in schools and develop a framework that portrays the key elements and their interrelationships within the processes. Through this theorising, the research questions are framed. They are:

1. What form does the interrelationship take between the participants in the budget setting process? Are there power relations?

2. Is there a tendency for the Principal and the Board to capture the budget setting process?

3. What are the benefits of wide stakeholder participation in decision making?

4. What are the disadvantages for decision makers when stakeholders are involved in the decision-making process?

By addressing these research questions in this particular setting, this study offers an understanding of how school boards make decisions on spending and allocating resources, and examines the benefits and drawbacks of stakeholder participation in the decision-making process. Through the method of qualitative case studies, this study provides insights into financial management strategies, budget setting deliberations and processes, actors' behaviours and interactions, and power influence. The findings may help the schools evaluate their actions and provide valuable information for the policymakers to revisit the policies. Chapter Three delineates the methodology and techniques employed by this research study for the purpose of understanding the financial management practices in the school sector. The theoretical framework that informs the study is also provided in Chapter Four.

CHAPTER THREE
RESEARCH METHODOLOGY AND METHODS

3.1 Introduction

This chapter describes the underlying research philosophy of this study and the techniques employed to address the research problems. The previous chapter has provided an overview of the financial management framework in the school sector, particularly the purposes of budgeting and the roles of participants in the budgetary process. This context has provided the particular setting for this study and has framed the primary research questions. This study attempts to enrich the literature about socio-technical interactions in the school sector and seeks to understand the social behaviours of actors while interacting with their interrelated entities. This study adopts a qualitative or naturalistic mode of research and engages ANT attempting to explain the phenomenon under study. The remainder of this chapter outlines the research method and design, data collection and method of analysis. It is then followed by a discussion of reliability, validity and trustworthiness of the study.

3.2 Research Paradigms

This section provides an understanding of the underlying assumptions of various research paradigms prevalent in the field of accounting. It mainly discusses the attributes of the "scientific" and "naturalistic" modes of inquiry for research process.

It is generally accepted in many areas of research, including accounting, that decisions about research methods should be informed by the nature of the research questions, the nature of the knowledge, and the nature of the phenomenon studied. Simmons (1995) suggests that any research method, whether qualitative or quantitative, depends on the researcher's personal worldview during the process of decision making.

Burrell and Morgan (1979)[12] and Morgan and Smircich (1980) provide an array of "world-views" which establish the relationships between ontology, human nature, epistemology, and methodology in contemporary social science. Table 6 exhibits the work by Morgan and Smircich (1980).

Morgan and Smircich (1980) argue that the objectivist approaches draw principally on the models and methods from the natural sciences, which view the social world as a concrete structure embedded in a closed system. The nature of the social world is measured by an objective and lawful relation between elements abstracted from their context. This assumption about the nature of reality (ontology) relaxes when one moves towards the subjectivist approaches. Morgan and Smircich contend that the subjectivist approaches appreciate the interaction of human beings with the social world which is viewed as an open system. This social reality is subject to phenomenon changes which occur over time in relation to its context.

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[12] Burrell and Morgan (1979) present the model of accounting research classification in a two-by-two matrix. One dimension positions alternative approaches to social science ranging from subjectivist to objectivist. The other dimension consists of different assumptions about the nature of society ranging from the sociology of regulation to the sociology of radical change. There are four sets of assumptions about the nature of the social science: ontology, epistemology, human nature and methodology.

Table 6. Network of basic assumptions characterising the subjective–objective debate within social science

	Subjectivist Approaches to Social Science					Objectivist Approaches to Social Science
Core Ontological Assumptions	Reality as a projection of human imagination	Reality as a social construction	Reality as a realm of symbolic discourse	Reality as a contextual field of information	Reality as a concrete process	Reality as a concrete structure
Assumptions About Human Nature	Man as pure spirit, consciousness, being	Man as a social constructor, the symbol creator	Man as an actor, the symbol user	Man as an information processor	Man as an adaptor	Man as a responder
Basic Epistemological Stance	To obtain phenomenological insight, revelation	To understand how social reality is created	To understand patterns of symbolic discourse	To map contexts	To study systems, process, change	To construct a positivist science
Some Favored Metaphors	Transcendental	Language game, accomplishment, text	Theater, culture	Cybernetic	Organism	Machine
Research Methods	Exploration of pure subjectivity	Hermeneutics	Symbolic analysis	Contextual analysis of Gestalten	Historical analysis	Lab experiments, surveys

Source: Morgan and Smircich (1980, p. 492)

Morgan and Smircich (1980) also observe that different approaches and methods are necessary for examining social phenomena where individuals are constantly interacting with the social world and constitute some form of "open-ended process" (p. 498). They urge that researchers can no longer remain as external observers who measure what they see in the field of study. Morgan and Smircich affirm the need for a more reflexive approach of research in order to understand the nature of the social world and to capture the meanings of social behaviour. They conclude that the precise nature of the research methods and techniques are shaped within the ideology of the researcher and the nature of the phenomenon to be studied. The debate over methodology, whether it is quantitative or qualitative, is concerned with the explicit revelation of the researcher's underlying assumptions about the subject of study.

Drawing on Morgan and Smircich's (1980) work, Tomkins and Groves (1983) simplify the subjective–objective continuum into six basic ontological assumptions sets (see Table 7).

Table 7. Six basic ontological assumption sets

	Six Basic Ontological Assumptions
1.	Reality as a concrete structure
2.	Reality as a concrete process
3.	Reality as a contextual field of information
4.	Reality as symbolic discourse
5.	Reality as social construction
6.	Reality as projection of human imagination

Source: Tomkins and Groves (1983, p. 367)

Tomkins and Groves believe that the six categories determine the research paradigms or ways of looking at the social world. The approaches in categories 1, 2 and 3 are scientific and tend to describe the social world as a network of determinate relationships. From a different vantage point, the approaches in categories 4, 5 and 6

encompass the naturalistic perspective which seeks to unfold the meanings interpreted by individuals interacting in the sphere of their social life.

Resonating with Morgan and Smircich's (1980) argument, Tomkins and Groves (1983) conclude that this is not just a choice between the scientific and naturalistic approaches, but a range of approaches that is available for the research process. They observe that accounting researchers have ignored or been unaware of the existence of "intermediate approaches" and therefore accounting research has been built on a very narrow foundation. Tomkins and Groves, therefore, call for a fair sprinkling of accounting research effort all along the subjective–objective continuum to build a broader basis for accounting research and bring the researchers closer to their social world.

In debating interpretive research in management accounting from the perspective of naturalistic philosophy of science, Kakkuri-Knuuttila, Lukka, and Kuorikoski (2008) argue that interpretive studies encompass both subjectivist and objectivist features. Kakkuri-Knuuttila et al. provide evidence for their argument through an in-depth analysis of the study by Dent (1991) which was a report of a longitudinal study tracing the process of cultural change in a state owned railway company. Kakkuri-Knuuttila et al. claim that Dent's study includes elements of interpretation of human action and theoretical explanation of cultural change. Hence Kakkuri-Knuuttila et al. describe interpretive management accounting straddles between subjectivist and objectivist paradigms. In practice, interpretive management accounting research seeks to understand how social reality emerges from subjective interpretations and is objectified through human interactions (Ahrens, 2008; Ahrens and Chapman, 2006). Management accounting researchers should study accounting in context "in which local concepts, artefacts, and material and spatial arrangements can be placed before a wider background" (Ahrens, 2008, p. 294).

3.2.1 Scientific Versus Naturalistic Modes of Research

Accounting research has been traditionally developed by borrowing models and methods from the natural sciences (Morgan, 1983; Tomkins & Groves 1983). Blumer (1978) describes that this scientific research paradigm starts with a theory formulated in terms of relationships between categories. A research problem is established, and then transformed into hypotheses, hence into dependent and independent variables representing the categories identified. Data is collected through rigorous and highly structured procedures, and analysed by using the mathematical and statistical techniques to arrive at an explanation of the relationships. Tomkins and Groves describe that the relationship is "an almost exclusively quantitative validation of the hypotheses tested" (p. 362).

Fitzgerald, Youngs and Grootenboer (2003) conducted a quantitative research to investigate teachers' perceptions of the bureaucratic and professional approaches to performance management in their schools. A postal questionnaire was distributed to primary and secondary school teachers in the eastern and western Bay of Plenty area of New Zealand. The study measured the teachers' perceptions based on two factors: the number of units held by the participants and the degree to which they were involved in the review of the school's appraisal systems. The study concluded that teachers want to be accountable for their professional work and the involvement of teachers in developing school-level appraisal systems is fundamental to the long-term success of appraisal in New Zealand schools.

Leana and Pil (2006) examined social capital and its relationship with performance at the organisational level. They predicted that both internal and external social capital will have a positive effect on organisational performance. They tested their hypotheses in 88 urban public schools in the northeastern United States where they collected data from principals, teachers, parents, and students. Results indicate that both internal social capital (relations among teachers) and external social capital (relations between the principal and external stakeholders) predict student achievement in mathematics and reading. These effects were sustained over time for reading achievement, providing support for a causal relationship between social capital and performance. The study provides evidence that social capital's impact on

student achievement in mathematics – but not reading – is mediated by the quality of instruction provided by teachers. These results underscore the importance of context in studies of social capital.

While discussing the methodological principles of empirical science, Blumer (1978) challenges this scientific research approach:

> *This conventional protocol of scientific analysis is not suitable or satisfactory for the kind of analysis that is needed in direct examination of the empirical social world. Even though using the more realistic data yielded by exploration, the conventional protocol of scientific analysis still forces such data into an artificial framework that seriously limits and impairs genuine empirical analysis.* (p. 41)

To overcome the weaknesses of this conventional scientific approach, Blumer (1978) suggests employing the naturalistic approach which contains two modes of inquiry: *exploration* and *inspection*.

Exploration is concerned with both the way by which a researcher can form a close relationship with the social world that is unfamiliar to him, and the means of gaining insights into the social reality. Blumer (1978) explains that exploration is a flexible procedure that allows a researcher to have a broad direction initially and sharpen his focus progressively as the inquiry proceeds. There are neither vigorous research techniques nor determined sets of variables. The guiding principle is to "use any ethically allowable procedure that offers a likely possibility of getting a clearer picture of what is going on in the area of social life" (Blumer, 1978, p. 39). These procedures may include interview, observation, listening, note-taking, documentary analysis and group discussion. Blumer, therefore, recommends a researcher be constantly alert, sensitive and responsive to his social surroundings. This direct examination enables a researcher to form an intimate networking with the social context and then capture a comprehensive picture of the problematic area under study.

Exploration is accompanied by *inspection* which seeks to analyse a problem in the form of theoretical proposition. Blumer (1978) explains:

> *As a procedure, inspection consists of examining the given analytical element by approaching it in a variety of different ways, viewing it from different angles, asking many different questions of it, and returning to its scrutiny from the standpoint of such questions.... Instead, inspection is flexible, imaginative, creative, and free to take new directions.* (p. 42)

Blumer concludes that exploration and inspection combined constitute the necessary procedure in the naturalistic mode of research in the empirical social world.

To support Blumer's (1978) advocacy of the naturalistic mode of research, Tomkins and Groves (1983) call for a debate [13] on the issues raised in the research methodology. They argue that the naturalistic research approaches should be used to provide deeper insights into the effects of accounting and the practices of accountants themselves.

In a similar vein to Morgan and Smircich (1980) and Tomkins and Groves (1983), Boland and Pondy (1983) declare:

> *Research on accounting in its organizational context is most fruitfully done by attempting to understand how its rational and natural aspects interact within the lived experience of individuals. Accounting serves both objective and symbolic functions. Research that emphasizes a genuine union of the two aspects reveals accounting's role as a complement and supplement to more qualitative and interactive forms of problem solving. It also reveals that accounting is a technique that must be transcended to be used effectively and that its inadequacies challenge humans as moral agents.* (p. 223)

While studying the development of organisation theory, Boland and Pondy (1983) view that "problems are not simply presented to managements, problems are constructed by them" (p. 223). There are two ways to solve the problems: the rational and the natural. The rational model is guided by quantitative, literal analysis, whereas the natural model is guided by qualitative, symbolic interpretation. Boland and Pondy argue that "organizations and their accounting systems are not to be understood as either natural or rational but as both, simultaneously, in a relation of mutual context" (p. 225). They go on to explain that any aspect of organisation has its dual nature of rational and nature, in which subjective experience, once

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[13] For an extended view of the debate on the scientific and naturalistic modes of inquiry, see Tomkins and Groves (1983), Abdel-Khalik and Ajinkya (1983), Morgan (1983), and Willmott (1983).

externalised, becomes objective reality, and that the rational model inherently has its symbolic and interpretive nature.

To support their argument, Boland and Pondy (1983) propose a number of requirements that a research process must follow:

- The research must focus on the study of the individuals in organisations in regard to how they interpret accounting, not focus on the study of the accounting itself.
- The research must use case analysis in which the perspectives of individual actors are to be studied with a view to understanding accounting as a lived experience.
- The research must be interpretive and appreciate the symbolic use of accounting in social ordering that gives meanings to the individual's experience.
- The researcher must take a critical view of the actor's definition of the situation, in the sense that the actor's subjective interpretation must be transcended.

Morgan and Smircich (1980) and Boland and Pondy (1983) appreciate the qualitative methods for accounting research in its organisational context. Morgan and Smircich emphasise the relationship between theory and method, and the broad differences in methodological approach; Boland and Pondy highlight the union of natural and rational systems that accounting is a complement and supplement to more qualitative and interactive research approach.

There has been growing concern about the inappropriateness and deficiency of this so-called "positivist" tradition dominating accounting research for the study of social phenomena (Morgan, 1983). For the past two decades, the call for the use of qualitative methodology has persisted.

In addition, Berry and Otley (2004) argue that the quantitative research approach is only justifiable in the physical sciences, which are rationalist, realist and positivist.

The nature of knowledge in the social sciences, however, is different from that in the physical sciences. Where social phenomena are concerned, it is appropriate to use the qualitative form of inquiry which is described as subjectivist, interpretive and naturalistic.

While examining the qualitative field research in management accounting, Ahrens and Chapman (2006) agree with Chua's (1986) ontological assumption that social reality is emergent, subjective and objectified by human interaction. Ahrens and Chapman believe:

> *Doing qualitative field studies is not simply empirical but a profoundly theoretical activity.... The practice of doing qualitative field studies involves an ongoing reflection on data and its positioning against different theories such that the data can contribute to and develop further the chosen research questions. Data are not untainted slices of objective reality but aspects of recorded activity that a study finds significant for theoretical reasons.* (p. 820)

This echoes Lee and Humphrey's (2006) assertion that "qualitative research methods are particularly well suited to studies that seek to understand the origins and role of accounting in its specific historical, social and organisational context" (p. 183).

Irvine and Gaffikin (2006) acknowledge that the social reality is socially constructed and can be changed by the activities of the researcher within its context. These interpersonal relationships provide the researcher with insights which are emergent and grounded in the field. Irvine and Gaffikin therefore call for more qualitative accounting research in order to capture "the dynamic and contextual complexity of living organizations" (pp.115–116).

This section has addressed the conflicting features between the scientific/quantitative and naturalistic/qualitative research methods. Both research methods have their respective philosophical assumptions about the social reality that explains the phenomenon being studied. The decision on research approach, whether scientific or naturalistic, depends on the researcher's personal worldview (Simmons, 1995). With regard to this study, the researcher tends to adopt the *middle range*

approach on the subjectivist–objectivist continuum that supports Laughlin's (1995) advocacy of middle range thinking.[14] Laughin argues that both extremities on the continuum have their inherent weaknesses, and that middle range thinking could preserve their complementary strengthens.

3.2.2   Qualitative Research Approach

This section provides an account of the past studies which employed the qualitative approach to explore the research questions. These studies have provided the researcher with the methodological platform for this study.

Holland and Stoner (1996) examined the interrelationship between the companies and the authorities that regulate the stock markets by case studying 27 large UK listed companies. The study employed the method of semi-structured interview to explore the issues of voluntary disclosure, price sensitive information and fund management. Different types of general research questions were asked to allow the participants to interpret the phenomenon in their own way. Detailed questions were deliberately not used as the study focused on "the interviewees' reflected verbalised thoughts, thereby providing valuable insights into the subjective understanding of the individuals' life worlds" (Holland & Stoner, 1996, p. 299). Holland and Stoner conclude that qualitative research methods provide rich insights into the interaction of individuals with the social context of everyday practices and decisions.

Collier (2001) conducted a field study in a UK police force examining how the devolution of budgets has changed the relations of power within the organisation. This was an ethnographic study which applied the institutional theory to understand the context, process and consequences of the introduction of devolved budgeting systems to the organisation. Collier declares that the study is based on "contextually grounded social interaction" in order to "develop a rich theoretical framework capable of explaining the quality of observed social systems and practices" (p. 470).

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[14] Laughlin (1995) classifies empirical accounting research on the basis of three dimensions: theory, methodology and change. Theory involves the philosophical view about the nature of the social world, what constitutes knowledge and the level of theory used in the research study. Methodology involves the nature and role of the researcher in the study and the level of prior theorisation. Change involves the position to achieve a social change.

The study has focused on the experiences and attitudes of managers in their organisational life. Consequently, Collier concludes that accounting, acting in a form of devolved budget, can satisfy both institutional and technical demands.

Abdul-Rahman and Goddard (1998) studied the accounting practices in two religious organisations in Malaysia by the use of ethnographic methods of inquiry in order to understand the religious organisation's culture and value systems. They believe that employing an ethnographic study of accounting practices considers "the subjective nature of human understanding and the complexity of human relationships in using accounting technology" (Abdul-Rahman & Goddard, 1998, p. 186). They conclude that accounting practices associated with accountability in these religious organisations are unimportant and accounting information has little meaning and usefulness to participants.

Brown (2005) examined the various ways of performance management implemented in 30 primary schools in England. The study focused on particular problems and difficulties associated with the initiative such as the meaning and purposes of performance management; education and training for performance management; formulation and content of performance management objectives; measuring the performance of heads and teachers; the effects of performance management on teachers' professional development; and perceptions concerning the appropriateness and reality of performance related pay. It adopted a triangulation approach involving a combination of documentary analysis, participant observation and audio-taped interviews with primary school headteachers, deputy headteachers, teachers and school governors. The study concluded that the question of whether performance management in helping to improve the quality of primary education in England was unclear. There were three reasons. Firstly, the initiative was implemented in all schools simultaneously, it was impossible to compare the performance of schools where performance management was introduced with those where it was not. Secondly, at the time of performance management was introduced, many other changes were taking place in England's state maintained, schools. It was not easy to disentangle the effects of performance management from other government imposed changes on overall school improvement. Thirdly, it was difficult to evaluate the

overall effectiveness of the initiative because the implementation of performance management varied among schools.

Storey (2002) described and examined the nature of Balance Scorecard as a conceptual framework. Storey (2002) attempted to apply this framework to performance management in the UK schools. Key elements were identified and these related to issues concerning goal setting, the distinction between Enablers and Results criteria in the model, and the importance of measurement to track progress. Drawing upon research with secondary data accessed at the Department for Education and Skills, the study suggested that there was a degree of culture change in schools to accept the principles embedded in the Balance Scorecard model. However, in order to evaluate the model empirically, it is necessary to undertake primary analysis through comparative case research.

The growing application of qualitative research has been given impetus by Guthrie and Parker (2004). Guthrie and Parker advocate "an alternative academic super-structure that is of at least equal standing to that developed by those who choose to continue to rely on financial economics to provide their insights into accounting, auditing and accountability" (p. 10). They stress that alternative paradigms to positivist paradigms include critical and interpretive approaches. Furthermore Guthrie and Parker warn that "one unitary paradigm is nonsensical and threatens to limit and potentially damage the variety, relevance, significance and impact of both past and future accounting research" (p. 10). The willingness of editors to publish qualitative research has demonstrated that qualitative research approaches have been increasingly supported and respected. Table 8 provides a selection of international journals that publish qualitative research.

To promote the qualitative case study research method, Scapens (2004) declares, "as editor-in-chief of *Management Accounting Research* I have encouraged the use of case studies and in the journal's first ten years (1990–1999) 24% of the papers used case study research methods, and a further 13% used field studies" (p. 257). Given the flourishing development of qualitative accounting research, this study is encouraged to adopt the qualitative method to explore a broad range of issues in the school sector.

Table 8. A selection of international journals in accounting and finance that publish qualitative research and their launch dates

Rank	Journal Title	Launched
5	Accounting, Organizations and Society	1976
7	Journal of Accounting and Public Policy	1982
15	Critical Perspectives on Accounting	1990
17	Management Accounting Research	1990
25	Accounting, Auditing & Accountability Journal	1988
26	Accounting Historians Journal	1974
35	Pacific Accounting Review	1988
37	Public Money and Management	1981
39	Accounting Business and Financial History	1990

Source: Lee and Humphrey (2006, p. 186)

3.3   Case Studies

Yin (2003) recommends the case study method which is used to cover contextual conditions. Yin defines:

> *A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident…. The case study inquiry… relies on multiple sources of evidence… [and] benefits from the prior development of theoretical propositions to guide data collection and analysis.* (pp. 13–14)

While calling for more case study research, Otley and Berry (1994) argue that the case study research method "provides a vehicle by which theories can be generated and modified in the light of data" (p. 47). Case study research is likely to be most valuable given that the initial theoretical position is clear and modification is developed as further evidence emerges.

Berry and Otley (2004) believe that case-based research in accounting is prominent in qualitative research because of its complexity and richness in "understanding and theorising the content, processes and contexts of the practice of accounting" (p. 231). They suggest that case-based research, as in other research, should clarify the distinction between theory, ontology, epistemology and method, which are

interconnected to frame the research problems and research approaches. They also observe the different stances of ontology and epistemology from objectivist to subjectivist.[15]

Berry and Otley (2004) highlight that specified design in the case-based research is not necessary as it would obstruct the flexibility of the process of data collection. Sometimes, the depth and breadth of data and insights need to be compromised given the limitation of access and confidentiality. Therefore, "a case-based design might be like a snowball, with one case leading to another, gaining complexity and subtlety of insights as they build" (Berry & Otley, 2004, p. 235). Lastly, Berry and Otley argue that case-based research is a type of inductive research leading to the development of new theory, or at least the elaboration of existing theory.

3.3.1   Types of Accounting Case Study

Case study research methods may be quantitative, qualitative or a combination of both approaches in various methods. Scapens (1990, p. 265) has attempted to classify the types of accounting case studies. They are:

Descriptive case studies. These are case studies which describe accounting systems, techniques and procedures currently used in practice. A number of companies may be selected as cases to illustrate different accounting practices or the similarities in the practices of different companies. The research objective of these studies is to provide a description of accounting practice.

Illustrative case studies. These are case studies which attempt to illustrate new and possibly innovative practices developed by particular companies. Such case studies provide a picture of what has been achieved in practice. However, there is an implied assumption that the practices of "innovative" companies are, in some sense, superior to the practices of other companies. The case study itself cannot provide a justification for such an assumption.

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[15] For detailed discussion, see Burrell and Morgan (1979) and Morgan and Smircich (1980).

Experimental case studies. Accounting researchers frequently develop new accounting procedures and techniques which are intended to be helpful to accounting practitioners. However, it can sometimes be difficult to implement the recommendations of the researchers. An experimental case study could be used to examine the difficulties of implementing the new proposals and to evaluate the benefits to be derived.

Exploratory case studies. Case studies can be used to explore reasons for particular accounting practice. As such, they represent preliminary investigations which are intended to generate ideas and hypotheses for rigorous empirical testing at a later stage. The objective is to produce generalisations about the reasons for accounting practices. The exploratory case study is a first step in such a project.

Explanatory case studies. Such case studies attempt to explain the reasons for accounting practices. The focus of the research is on the specific case. Theory is used in order to understand and explain the specific, rather than to produce generalisations. If available theories do not provide convincing explanations, it may be necessary to modify them.

Scapens (1990, 2004) points out that the distinctions between these different types of case studies are ambiguous and ultimately the researcher determines the classification. He continues to highlight that case studies informed by social theory start with a notion that accounting practices are socially constructed and they can be changed by the social actors themselves. It is necessary to study the relationship between day-to-day social activities and the dimensions of social structure in both time and space. As such, the role of the researcher is to seek a set of rules which establish the relationship between the organisational behaviour and the social structures in its context. Specifically, accounting legitimates organisational activities to which organisational participants attempt to explain their actions by making reference. Furthermore, accounting is perceived as a source for the exercise of power in an organisation (Macintosh & Scapens, 1990). Scapens (1990) concludes that understanding accounting from its social perspective requires studying accounting in its historical, economic, social and organisational contexts, and case studies are particularly appropriate for this type of research.

3.3.2 Limitations of Case Study Research

Despite regular calls for more case studies of accounting, there are practical problems and challenges of conducting case study research. In general, case study research is perceived as lack of generalisation and academic rigour because of the small size of samples (Scapens, 1990). Scapens identifies three areas which the researcher commonly finds difficult. First, it is difficult to draw boundaries of the subject matter of the case as all aspects of social systems are inter-related to each other. Therefore, some limits must be explicitly set on the area of study. The second difficulty is the problem of researcher bias. Case study research is hardly objective as case studies are interpretations of the social reality by the researcher. Scapens suggests that this problem may be reduced by engaging a team of researchers with different backgrounds and experiences to minimise the possibility of personal bias. The final difficulty relates to the ethics of the researcher's relationship with the subject of study. All confidential information obtained during the process of the study should always be respected. Caution must be exercised when using these confidences in publishing the results of the study.

Finally, Scapens (1990) stresses that case studies are concerned with explanation, not prediction or statistical generalisation. Case studies are looking for theoretical generalisations and not statistical generalisations. Case studies may not provide solutions to the problems, but they can provide explanations of the problems.

Humphrey (2001) has expressed a number of concerns about the underlying problems with case study accounting research. He argues that case studies tend to underestimate the power and relevance of social theory in the accounting research.[16] The restriction of sensitive information within the organisation under study has posed another problem to the research process. If this is the case, secondary sources may be relied on for data collection. Most likely, the researcher would be faced with the dilemma between relevance and reliability, taking the risk of questioning the validity of the research study. Moreover, the validity of a case study primarily relies on academic integrity, the strength of peer review processes and the threat of legal action the participating organisations may take. Case studies are more descriptive in

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[16] For a detailed discussion of case studies informed by social theory, see Scapens (1990).

theory, but less analytical and practical in theoretical application. This approach lessens the chance of convincing the readers. Lastly, Humphrey points out that the barriers in understanding the experiences of other non-English speaking nations hinder the significance and relevance of the case study.

Concluding his concerns about the practical problems with accounting case studies, Humphrey (2001) suggests a change in the mind-set of the researchers by devoting a greater level of communication and shared understanding between case study researchers. Case study researchers should try to understand other researchers' work from their perspective and not from their own point of view. This could be achieved by the researcher's readings of the wider literature to understand the context in which such case study research is conducted.

3.4   Research Design

This study seeks to examine how relations and social entities come into being together during the budgetary process through the lens of ANT and tries to define and understand the meanings of human behaviours impacting on the framework of the settings in which individuals interact (Baker & Bettner, 1997). The research questions established in the previous chapter have been framed to unfold these complex relations. To obtain the information necessary to answer the research questions, a qualitative descriptive case study method is employed in this study. The case-based research findings are then interpreted by ANT describing how these complex social phenomena are interwoven with the accounting practices.

3.4.1   Selecting Suitable Cases

Three secondary state schools in Auckland are purposively chosen to ensure the samples are different either in roll or in decile. The school in which the researcher is working has been selected as a case for participant observation. Two other cases are chosen for participating in qualitative interviews to compare and contrast the differences and similarities with the case under participant observation. Difficulties were encountered while inviting schools to participate. Most of them rejected with a

reason of work commitment or current engagement in other research. After tedious effort, two schools of different size and decile expressed their interest and were willing to participate in this study.

Cases are identified for participation in accordance with the criteria that similar cases are selected to replicate the theoretical explanations, and dissimilar cases are chosen to extend the theory to wider circumstances. The purpose of such multiple cases selection is to capture the richness and diversity of accounting practices in various schools which might be operating differently to a certain extent in terms of income sources and expenditure patterns. The multiple cases would also serve to strengthen the findings and contrast comparisons (Yin, 2005). Theoretically, relevance can also be achieved by simultaneously maximising or minimising the differences and the similarities of data in the categories under study (Glaser & Strauss, 1967).

The cases selected have undertaken a "formal case study screening procedure" (Yin, 2005, p. 385). The screening criteria includes: (1) the willingness to participate in the study, (2) the richness of the available data, and (3) the case represents an instance of the purpose of the study. Scapens (1990) describes these cases as critical cases which directly address the research questions identified.

3.4.2   Data Collection

In this study, the main sources of data collection are participant observation, qualitative interviews, and documentary analysis. Data from various sources were considered necessary to achieve data triangulation that would increase the credibility and validity of the results.

3.4.2.1   Qualitative Interview

Qualitative interview has become a popular data collecting tool in qualitative research across disciplines, fields and research subjects (Denzin & Lincoln, 1998; Holstein & Gubrium, 2004; Myers & Newman, 2007). The qualitative interview is

mostly semi-structured or unstructured to allow facts, reflections and opinions to permeate the interviewing context. Through the process of questioning, interviews provide a conduit for generating empirical knowledge of the subject world (Holstein & Gubrium, 2004; Kvale, 1996).

Regardless of the type of interview, there is always a research subject placed in the interviewer's mind. The prime purpose of the interview is to obtain information of the lived world through conversations. Kvale (1996) describes:

> *An interview is a conversation that has a structure and a purpose. It goes beyond the spontaneous exchange of views as in everyday conversation, and becomes a careful questioning and listening approach with the purpose of obtaining thoroughly tested knowledge.* (p. 6)

Holstein and Gubrium (2004, p. 140) also portray this form of conversation as "active interview" which is interactional and interpretive.

An interactional and interpretive interview setting is important for collecting factual information and feelings residing within the respondent. The construction of valid information is the product of the interviewer and the interviewee. Both parties communicate in a way that the interviewer is excavating the treasuries of information hidden in the mind of the respondent. In most circumstances, the interviewee is reserved to divulge information particularly relating to sensitive interview topics until he or she has established a trusting relationship with the interviewer. Whether a trusting relationship could be built during interviewing largely depends on the qualification of the interviewer. Therefore Kvale (1996) suggests ten criteria of a successful interviewer. They are:

1. Knowledgeable – is familiar with the research subject.
2. Structuring – gives purpose for interview and conveys the purpose to the interviewee.
3. Clear – asks simple, clear and understandable questions.
4. Gentle – is patient with the interviewee who may pause before continuing.
5. Sensitive – listens attentively and is empathetic with the interviewee.
6. Open – is flexible and responsive to the interviewee.

7. Steering – stays focused on the research subject.
8. Critical – is prepared to challenge inconsistent information.
9. Remembering – relates issues appropriately.
10. Interpreting – clarifies understanding by confirming with the interviewee.

Fundamentally, the interviewer's performance shapes the form and content of the interview data. The meaning-making process is situated in the interviewer's techniques of questioning. The type of questions should be a combination of introducing, follow-up, probing, specifying, direct, indirect, structuring, silence and interpreting (Kvale, 1996). These types of questions create a social platform where the actors (the interviewer and the interviewee) interact and interpret meanings of the reality constituted in the conversations. Qualitative interview has been seen as the metaphor of the drama (de Sola Pool, 1957; Holstein & Gubrium, 2004; Myers & Newman, 2007). This dramaturgic metaphor is appropriate because "every interview is an interpersonal drama with a developing plot" (de Sola Pool, 1957, p. 193) which is "spontaneous yet structured" (Holstein & Gubrium, 2004, p. 152). The developing plot is scripted in the conversation embedded in the research subject. While the respondent constantly constructs the answers, the interviewer stimulates responses that help in exploring articulated aspects of experience, extending the meanings and encouraging associated research topics.

Holstein and Gubrium (2004, p. 151) suggest putting "the whats and hows of interpretive practice to work" by "formally and systematically provoking the respondent to formulate and talk about experience, opinions, and emotions in particular ways." The *hows* of interviewing refer to the interactional and interpretive meaning-making process. The *whats* of interviewing refer to the research subject and its related issues. Likewise, active interviewers converse with respondents in such a way that collaboration, hinting and exchange of answers are activated. The respondent's repository of facts, opinions, experience and reflections could be candidly extracted. Holstein and Gubrium support de Sola Pool's (1957) argument that the dynamic and interactional contingencies of an interview stimulates respondents' opinions.

In this study, the protocol of qualitative interviews recommended by Kvale (1996) is strictly followed. The interviewees include the Chairperson of the Board of Trustees, the Principal and the Finance Manager of the schools studied. Interviews with other people were also made. They were the ex-Deputy Principals of other schools who had experienced education intervention, an accounting professional working at a school who was known through the researcher's work network and an experienced trustee of a school Board who was referred by the Ministry of Education. These interviews were used to make cross-referencing to the findings of the cases studied. Consequently, research effort has been focused on the experiences and attitudes of top-level management. In all, 18 formal one-to-one interviews were conducted over a three-year period. Table 9 exhibits the categories of interviewees under each participating group.

Table 9. Categories of interviewees under participating groups

Participating Group	Number of Interviews
(1) Inside schools under study	
Principal	5
Chairperson of the Board of Trustees	3
Finance Manager	4
(2) Outside schools under study	
Accounting Professional	1
Ex-Deputy Principal	4
Member of the Board of Trustees	1

A face-to-face interview was arranged with each participant who gave responses to the interview questions (see Appendix 4). Although each participant was asked the same set of questions in the same order to enhance the internal validity (Yin, 2003), open-ended questions were posed to enable the interviewees to explore their experiences without boundaries. The specific issues discussed in any interview depended on the role of the interviewee and the extent of involvement in the budget setting process. The flexibility of open-ended questions allows the interviewees to highlight areas of particular interest and expertise that they think they have (Horton, Macve, & Struyven, 2004).

Practically, the interview questions are expected to lead to the broad nature of the meanings of human behaviour while interacting with the social world. The interview questions are, therefore, designed in a fashion that they help explore the real world of the interviewees and gain insights into how the interviewees see their actions within the contexts of accounting. The face-to-face interviews were conducted either in the participant's office or their domicile in order to allow the interviewee interacting with the researcher to freely develop unexpected themes as far as possible. This setting of the interview ensures that the role of the interviewer is to record the interviewee's views and to empathise with the interviewees so that a trusting and honest relationship is established (Stoner & Holland, 2004). Member checking took place throughout each interview seeking clarification and feedback to confirm understanding of a particular issue.

Each interview lasted for an hour on average; up to one and a half hours maximum. The interview records were audio-taped with the permission of the participants. Field notes were also taken to highlight the important comments that were observed throughout the interviewing process. The tapes were then transcribed for analysis.

3.4.2.2   Participant Observation

Atkinson and Hammersley (1994, p. 248) define participant observation as "observation carried out when the researcher is playing an established participant role in the scene studied." Discussing the study of ethnography, Atkinson and Hammersley observe that all social research is a type of participant observation because the social world could not be studied without being part of it. Therefore, participant observation is "not a particular research technique but a mode of being-in-the-world characteristic of researchers" (Atkinson & Hammersley, 1994, p. 249).

Participant observation provides in-depth, direct and ongoing interactions with people in their natural environment that produces real data reflecting organisational contexts and practices. Kotarba and Fontana (1984, p. 6) argue that, "one must immerse oneself in everyday reality – feel it, touch it, hear it, and see it – in order to

understand it." This observational approach offers the advantage of revealing hidden details and yielding insights about core meanings and experiences.

One of the chief criticisms against observational research lies in the concerns of validity. In the absence of members' analyses, observers are inclined to rely on their own interpretation, which could be susceptible to personal bias (Denzin & Lincoln, 1998). Denzin and Lincoln suggest that following an analytic inductive methodology could overcome the problem by testing emergent propositions for similarities and differences between cases.

Another criticism argues that observational research lacks reliability as there is no statistical analysis to substantiate the observed patterns or trends. However, Denzin and Lincoln (1998) believe that naturalistic observation provides insights that are more likely to be accurate for the study subject and to uncover new realities. Repeated observations conducted under varying conditions that yield the same findings are more credible and in turn enhance generalisability of the findings. Participant observation added onto other research methods extends the depth and breadth of the findings and strengthen their consistency and validity.

During the period of this study, the researcher was working at one of the schools being studied. Under participant observation, the researcher gained a close and intimate familiarity with the other participants and their working practices through an intensive involvement with the members in the school context. This opportunity enables the researcher to obtain more detailed and accurate information about people and artefacts. Observable details and hidden items are more easily observed and understandable over a longer period of time. One of the strengths of participant observation is that it allows the researcher to identify any discrepancies and contradictions that would not be discovered in a one-time survey.

Field notes were kept about what was seen, what was experienced and what was said in conversations. An account of events – how people behaved and reacted and the researcher's subjective responses – was also recorded. Objective description of what was observed was maintained throughout the process. These data were obtained through both formal and informal communications with the participants. Formal

communications included meetings, discussions, correspondence and emails. Informal communications included interactions with the participants during tea and lunch breaks, social functions and casual conversations. Finally, data obtained through participant observation served as a check against the participants' subjective reporting of what they believed. The data collected from the research field could be argued as an account of the researcher's interpretation and understanding based on her lived experience in the research object.

3.4.2.3   Documentary Analysis

To enrich analysis and enhance trustworthiness, both archived and current documents were examined and referenced. They include school charters, annual plans and targets, annual reports, monthly financial and management reports, minutes, school policies and procedures, Principal's monthly reports to the Board, audit reports, accounting records, budget documents, newsletters, year books, prospectus, office correspondence, and Education Review Office reports.

Reports, handbooks and guidelines issued by the Ministry of Education and other regulatory agencies that are relevant to this study were also accessed. They were easily accessible in the public domain from sources such as the internet and the public library.

The data collected through these varied sources were cross-validated with each other before they were used in this study.

3.5   Data Analysis

The interview records were audio-taped and then transcribed. The transcriptions were coded with a descriptive code having meaningful properties that describe them. As the process of coding progressed, various trends and patterns emerged. Commonalities and regularities found in the trends and patterns were categorised to form a common theme. To ensure reliability and consistency of the coding system,

the codes were discussed and checked by peer members, and codes were redefined when necessary.

Experience suggests that data collection and analysis are inevitably intertwined (Marginson, 2004). Using the constant comparative method (Glaser & Strauss, 1967), analysis and interpretation start to categorise the patterns emerging and seek connections among them as soon as data is collected and transcribed. To enhance procedural consistency, the seven stage approach (Easterby-Smith, Thorpe, & Lowe, 1991) was followed: case familiarisation, reflection on the contents, conceptualisation, cataloguing of concepts, recoding, linking, and re-evaluation. Themes and issues were then informed through the lens of ANT. If the existing theory conflicted with the patterns observed in the case, the data and analysis were revisited and further evidence from other sources was collected to ascertain explanations for these conflicts.

Given the sheer richness and variety of case study data generated in this study, interpretations were constantly redesigned until the optimal explanation emerged. To enhance the reliability of the data, primary data was given more weight than secondary data. If necessary, further interviews were undertaken to confirm the researcher's understandings, clarify the interpretations and retrieve missing data. There were three occasions where the researcher went back to the field for a repeated interview.

3.6   Ethical Considerations

The protection of privacy and confidentiality is well regarded in this study. The researcher involved in participant observation has committed that the identities of the people she observed or with whom she interacted are protected at all times. Maintaining confidentiality is essential by ensuring no individuals are linked to any data collected in the field. The persons who transcribed the interview records were required to sign a confidentiality agreement to ensure confidentiality of information known to her.

Informed consent was obtained from the interviewees prior to an interview. The identities of the interviewees remain anonymous and that of the schools selected for study is not disclosed. The gender of some individuals is also altered to protect their privacy. The interview records and their transcripts are kept by the researcher and they are restricted to the researcher's access only.

The researcher is well aware of the potential bias or prejudices in undertaking qualitative research. She has remained open throughout the research process and accepts alternatives in interpreting the phenomenon being studied.

3.7   Reliability and Validity of the Study

In positivistic studies, the question of reliability is concerned with the use of research instruments such as questionnaires, whereas the notion of validity is related to the objective reality (Ahrens & Chapman, 2006). With regard to the qualitative research, Chua (1986, p. 615) states that "social reality is emergent, subjectively created, and objectified through human interaction." In a similar vein to Chua (1986), Ahrens and Chapman (2006) consider that the notion of validity is not suitable for qualitative case study given the fact that the social reality is emergent and dynamic, and the question of reliability is characterised by "a mix of structured and unstructured data" (p. 833). Their view is that the reliability and validity of qualitative case study research should be evaluated with reference to the interpretations of the actors who are interacting within the social context. Ahrens and Chapman continue to argue that it is less likely to have identical interpretations from two different researchers who study the same organisation. In essence, the researcher's own prior theory and previous research experience determine the approach of the study the researcher takes (Ahrens & Chapman, 2006; Scapens, 1990). Hence, the theory which shapes the study directs the researcher's interpretation of the social reality.

Despite its shortcomings in regard to objectivity and generalisation, the trustworthiness of case study research could be enhanced by the researcher's readings of the wider literature to address the problem and identify a theory that can

frame the problem (Ahrens & Chapman, 2006). Given the problem and theory, the collection of certain data which are relevant to the study would be sought. In fact, problem, theory and data influence each other during the research process, and they have been refined to faithfully represent the area of the study.

Internal validity of case study is concerned with assessing the validity of the evidence collected in the context of the particular case. Scapens (1990) explains that case study research is a social activity in which both the researcher and the subject interact to form the interpretations and explanations of the case. Case study research is, therefore, concerned with its contextual validity.

In order to validate the interpretations of the data collected in this study, the procedures of member checks have been undertaken to ensure the records of interpretations are accurately reflecting the informants' recognition (Russell, 1996). Full independent coding and analysis is not considered in this study because of the constraints of the research environment. Instead, cross-checking of cases and informants' views of the same events and phenomena, the use of sourced documents for further assurance checks, and further repeated interviews with informants for clarification were conducted to enhance the internal validity. The use of multiple data sources and data collection techniques in this study has allowed for triangulation which enhances validity by testing each source of evidence against each of the other sources on the same issue (Marginson, 2004; Scapens, 1990).

It is noted that the justification of case study method is based on the balance of access, practicality, reliability and validity (Stoner & Holland, 2004). A trade-off of reliability and validity has been taken into account as difficulty has been encountered in obtaining access to the field. As such, cautions need to be exercised when generalisation is drawn from the research study. To argue the issue of generalisation of qualitative research, Kvale (1996) states that analytical generalisation is based on an analysis of the similarities and differences of the two situations; it emphasises contextuality and heterogeneity of knowledge. It may be problematic to generalise beyond the case study subjects. In this sense, Marginson (2004) believes that the quality of a case study depends on three key qualities of the research: (1) the accuracy and honesty of observation, (2) the sensitivities and

perceptions of the observer, and (3) the imaginative interpretation of observations. The quality of the research's findings, in turn, relies upon the soundness of the data collected, and the interpretation applied to such data.

Yin (2005, pp. 390–391) summarises some guidelines for using case study method:

1. The case study method is to examine, in-depth, a "case" within its "real life" context.
2. The case study method is best applied when research addresses descriptive or explanatory questions and aims to produce a first-hand understanding of people and events in the social context.
3. The case study method requires the researcher's skill and expertise at pursuing inquiry and data collection at the same time.
4. A case study design involves defining the case, justifying the choice of a single- or multiple-case study, and deliberately adopting or minimising theoretical perspectives.
5. The screening goal is to select cases which are viable or represent an instance of what the researcher intends to study.
6. In collecting case study data, the researcher should "triangulate" or establish evidence from various sources to make the findings as robust as possible.
7. Case studies should present their data formally and explicitly, in a variety of presentation formats.
8. Analysis can employ several techniques throughout a case study as the researcher gradually builds an argument that addresses the research questions.

3.8   Ensuring Trustworthiness

The data collection and analysis in this study conform to the case study protocols as recommended by Yin (2005). Four techniques proposed by Yin are employed to ensure trustworthiness of the findings: (1) construct validity, (2) internal validity, (3) external validity, and (4) reliability.

Construct validity. Data is triangulated through various sources seeking convergence among sources of evidence to make the findings as reliable as possible.

Internal validity. Member checking is employed to ensure credibility. Debriefing sessions are arranged with research supervisors to test the researcher's initial understanding of the data gathered. It also involves follow-up contacts with the research participants to verify the researcher's understanding of their interpretations.

External validity. The generalisation of the findings is achieved as far as possible by purposively selecting multiple cases that would enrich the similarities, and by contrasting comparison under a prior theoretical framework.

Reliability. The procedures of the study are documented to validate the replication of the findings.

The four tactics are rigorously followed throughout the research process to ensure trustworthiness of the findings and credibility of the study.

3.9   Conclusion

This chapter firstly outlines the underlying assumptions of various research paradigms prevalent in the accounting research. It is generally accepted that decisions about the research method should be informed by the nature of the research questions, the nature of knowledge and the nature of the phenomenon studied. An array of assumptions about the nature of reality could be explained by the subjective–objective continuum. The objectivist approaches view the social world as a concrete structure embedded in a closed system, whilst the subjectivist approaches view the social world as an open system subject to phenomenon changes over time in relation to its context. The chapter continues to contrast the scientific with naturalistic modes of research. The scientific research paradigm is criticised as not suitable for direct examination of the social reality which is emergent, subjective and objectified by human interaction. The naturalistic approach, however, is more flexible where social phenomena are concerned. Through examining a number of

past research studies, it illustrates the strengths of the naturalistic mode of inquiry for qualitative accounting research, particularly in studies aiming for understanding accounting as a lived experience in its socially constructed context. Next, the chapter discusses using the case study method as it allows cases to be examined within its real life context. The limitations of case studies in terms of generalisation, researcher bias and validity are also evaluated. In this study, three cases are purposively selected to enrich the findings, and data is collected primarily through qualitative interviews, participant observation and documentary analysis. The interview records are audio-taped and then transcribed. Given the sensitivities of the data, the identities of the participants are kept confidential. The case study protocols are rigorously followed to enhance the reliability and validity of the study and its trustworthiness.

CHAPTER FOUR
THEORETICAL FRAMEWORK – ACTOR-NETWORK THEORY

4.1   Introduction

This chapter introduces the domain of ANT, a socio-technical perspective for analysing the interactions between human and technological processes. Its contributions to management accounting and its weaknesses are also discussed. This study applies the concepts of ANT to case studies of budgetary process in schools. It also attempts to contribute to the ANT literature by examining the behaviours of the heterogeneous actors during the budgetary process where the budget plays a critical role in interest alignment, demonstrating how ANT can be used to analyse the budget setting process and provide insights into wide applications in which social and technological contexts are dynamically connected with the powers of association.

Specifically, ANT includes the non-human actors in the analysis, thereby allowing for a more complete articulated examination of the role of accounting technologies in an organisational context. Also, ANT acknowledges the collectivity of a group of individual actors to reduce network complexity (Law, 1992). Sarker, Sarker, and Sidorova (2006) believe that ANT can serve as a useful theoretical lens for understanding socio-political phenomena. The application of ANT to this study may cast some light on the ways that the budgetary process should be undertaken in order to understand the interrelations between actors.

4.2   An Overview of Actor-Network Theory

ANT originated from the studies of science and technology. In the early 1980s, Bruno Latour, Michel Callon and John Law developed ANT, which places a strong emphasis on empirical inquiry in scientific research settings (Doolin & Lowe, 2002;

Williams-Jones & Graham, 2003). Latour (1999b) defines ANT as "a theory of the space or fluids circulating in a non-modern situation" (p. 22), and the connection established in this situation is constituted by humans and non-humans alike. Latour (2005) further explains:

> *For ANT, as we now understand, the definition of the term is different: it doesn't designate a domain of reality or some particular item, but rather is the name of a movement, a displacement, a transformation, a translation, an enrollment. It is an association between entities which are in no way recognizable as being social in the ordinary manner, except during the brief moment when they are reshuffled together.* (pp. 64–65).

Latour (2005) adds that ANT is a concept which acts as a tool to describe something, not what is being described. In simple terms, "the theory examines the motivations and actions of human actors that align their interests around the requirements of non-human actors" (Gao, 2005, p. 257).

Over the years, ANT has provided evidence that it allows analytical flexibility to move from its origins in science and technology studies into social science, psychology, anthropology, politics and economics (Lee & Hassard, 1999). In sum, ANT is not only ontologically relativist, showing that the world may be organised in many different ways, but also empirically realist showing that organisational processes could be described easily.

Most importantly, the central concept of ANT is the symmetrical treatment of human and non-human actors embodied in a network being studied. As a consequence, ANT is an application of semiotics which states that entities take their shape or form and acquire their attributes from their relations with other entities (Law, 1999). Law defines this emphasis as "relational materiality". In this sense, entities do not have their own inherent qualities; their distinctions and divisions are abandoned. All entities in ANT, whether human or non-human, are not fixed and do not have significance in and of themselves (Law, 2000). Rather, entities achieve their significance through relations with other entities in the system. In other words, humans and non-humans, technical and social and all the rest have no significance except in relation to other elements in their context. "If differences exist it is because they are generated in the relations that produce them. Not because they exist, as it

were, in the order of things" (Law, 2000, p. 4). The consequence of relational materiality is the symmetric treatment of humans and non-humans.

One significant application of ANT is to investigate the organisational process whereby the respective interests of individual human and non-human actors are aligned into a social and technological arrangement or artefact (Gao, 2005). An artefact is any object made by human beings. In ANT terms, an artefact refers to a technological design and innovation. In this study, there are an array of artefacts from policies and procedures to accounting technologies and budget documents.

On recalling ANT, Latour (1999b, p. 15) has been reluctant to use the term and he explains, "I will start by saying that there are only four things that do not work with ANT; the word actor, the word network, the word theory and the hyphen! Four nails in the coffin."

An actor is "any element which bends space around itself, makes other elements dependent upon itself and translates their will into the language of its own" (Callon & Latour, 1981, p. 286). Examples of actors include humans, texts, graphical images and technical artefacts. Latour (1999b) defines network as a series of transformations without deformation which is instantaneously accessible to every piece of information. Latour (1999b) portrays the social as a circulating entity that has no distinction between micro and macro, individual and structure. He describes the society as the summing up of interactions through devices, inscriptions and forms into a very tiny local and practical locus. Latour (1992) describes inscription as a process of creating artefacts that would ensure the protection of a certain interest. Latour (1999b) concludes that ANT is not a theory of the social, instead it is a theory of a space in which the social circulates. Law (2009, p. 141) acknowledges, "the actor-network approach is not a theory. Theories usually try to explain why something happens, but actor-network theory is descriptive rather than foundational in explanatory terms…." He adds that actor-network theory tells stories about 'how' relations assemble or how they do not. Law (2009) suggests that ANT could be used as a toolkit for telling interesting stories about those relations. Greenhalgh and Stones (2010, p. 1288) also support that "ANT may provide conceptual tools and inspirations, but not a sophisticated theory of either human agency or the generative

causality of social structures. In discussing a political critique of management and organisation studies, Alcadipani and Hassard (2010, p. 423) suggest, "ANT can be seen as an approach to the field that offers analytical tools that can be applied to narrative knowledge, be they organizational or otherwise."

Bryson, Crosby and Bryson (2009) illustrate that ANT is a methodology that focuses on associations or connections between humans and non-humans and how these associations are produced, become stabilised and legitimised, or change, through strengthening or weakening associations. To examine the ostensive aspects of any set of associations, power is to be produced. However, distributions of power within actors can change as associations change. Finally Bryson, Crosby and Bryson conclude that ANT is a method well-suited to study strategic planning in practice whether inclusive, participative, or democratic. Similarly, ANT could be well situated to reveal how the associations of actors in the school budgetary process are produced and how power within actors is distributed.

In fact, ANT interweaves "nature, politics, and discourse, to account for difference without authorizing dichotomous distinctions between domains, such as Science, Technology, or Society" (Fountain, 1999, p. 349). Actors in the network are heterogeneous elements of people, technology, machines and objects (Doolin & Lowe, 2002). Whittle and Spicer (2008) support Law (1991)'s assertion that organisations are understood as networks of heterogeneous actors whether social, technical, textual or naturally occurring events, object and processes that are brought together into stable associations or alliances. Whittle and Spicer contend that ANT helps us understand how relationships can be organized and stabilised to create a durable and robust network. To understand how these elements are interacting with each other to create meanings and attributes to various actors, it is essential to study the networks of relations of these elements, or the actor-networks.

4.2.1 Actor-Networks

ANT appreciates that human and social elements constitute a socio-technical network of actors explaining how power is distributed and how it is managed in the

social order (Turner, 2005; Usher & Edwards, 2005). Law (1992) explains that human beings form a social network because they interact with not only human beings but also other materials. And these heterogeneous interactions form the social order embedded in the actor-networks.

ANT begins with an identification of actants.[17] Then one would follow the actants through a series of programmes until they become actors, acquiring a distinct and stable character (Czarniawska & Hernes, 2005). Due to the mobilisation and stabilisation of networks of actants, the actor-network forms. In practice, networks are stabilised and mobilised by actors, which may be human or non-human. Examples of non-humans are animals, objects, policies, technologies such as accounting, and concepts such as budgets. Non-human actors are given a voice through "spokespersons" who are allies in the actor-network (Alcouffe, Berland, & Levant, 2008) speaking on behalf of other actors (Callon, 1986; Walsham & Sahay, 1999). Human and non-human actors in the networks fabricate, negotiate and collaborate common definitions and meanings in pursuit of learning and knowledge-building (Usher & Edwards, 2005).

An actor-network is a heterogeneous network of actors with aligned interests such as people, organisations and standards (Walsham & Sahay, 1999). Actor-networks are systems of alliances which are unstable over time and need to be maintained through continual enrolment of actors into the network (Doolin & Lowe, 2002; Williams-Jones & Graham, 2003). The enrolment of allies in a network involves "persuading other actors that they share a common interest or problem" (Doolin & Lowe, 2002, p. 72). As networks build, a heterogeneous network is treated as an individual actor to reduce network complexity. Law (1992) refers to this concept as "punctualisation".

Resistance is inevitably going to happen if an actor defines itself differently from the others. If unsuccessful, the networks may fail and be replaced by other networks in the form of betrayals and controversies. The success of alliances could only be achieved by the process of translation in which actors accept the roles defined and attributed to them. The successful alliances become "black boxes" which are stable

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[17] Actants denote human and non-human actors. Actants in a network take the shape that they form by virtue of their relations with one another.

and will not be questionable (Alcouffe et al., 2008). The actor-network is irreversible when it is impossible to return to a point where alternative possibilities exist (Walsham & Sahay, 1999). Latour (1999c) defines the phenomenon of black boxes as:

> *...the way scientific and technical work is made invisible by its own success. When a machine runs efficiently, when a matter of fact is settled, one need focus only on its inputs and outputs and not on its internal complexity. Thus, paradoxically, the more science and technology succeed, the more opaque and obscure they become.* (p. 304)

The formation of a network, however, is not the end of the story as networks are always unreliable and unstable (Tatnall & Gilding, 1999). The entry of new actors, abandonment of existing actors, or changes in alliances can cause the black boxes of networked actors to be opened and their contents reconfigured. This will bring about a new construction of the actor-network through the mechanics of power. This newly formed actor-network either competes with or enlists other existent networks. The success of a network relies on the process of translation.

4.2.2 Process of Translation

The central tenet of ANT is that there is no stable theory of the actor; in other words, "it assumes the radical indeterminacy of the actor" (Callon, 1999). It is of interest to investigate what brings actors together in a network and encourages them to participate in activities. The answer is *translation* – the glue which is strong enough to hold the society together (Latour, 1986). To suggest the strategies of translation, Law (1992) explains that some materials are more durable than others, and therefore they can maintain their relational patterns for longer. To maintain longer relations, they are embodied in inanimate materials such as texts and buildings. Therefore, a good ordering strategy is to embody a set of relations in durable materials. To put it this way, a relatively stable network is embodied in and performed by a number of durable materials. It is said that these durable materials have been inscribed in the actors.

Callon (1986) defines translation as "the mechanism by which the social and natural worlds progressively take form" (p. 224). For simplicity, translation is the process of making two different entities equivalent (Law, 1999). To transform different entities to become equivalent, it involves changes in the alignment of individual interests in a network, thus creating a temporary social order (Sarker et al., 2006). The process of translation involves an actor who reinterprets the interests of other human actors and the interests of non-human actors assigned as one's own, and then these interests are embodied in the inscription (Gao, 2005). This continual process of translation results in a situation that certain entities control other entities. In the broad sense, between humans, translation could be defined as "negotiation of common interests". Between humans and non-humans, translation is described as the interaction through "design of scripts" (Williams-Jones & Graham, 2003, p. 275).

Every actor in the network is independent and possesses its own set of interests. The stability of the resulting network is, therefore, determined by the ongoing translation of interests until the actors are enrolled in the network. The process of translation transforms phenomena into resources, and resources into networks of power which seek to form alliances, to engineer antagonism and to constitute interests (Ezzamel, 1994). The human elements in the social world are linked together in such a way that power relations are established to form a social order. Williams-Jones and Graham (2003) conclude that these interactions between actors are the building blocks of networks which generate institutions, governments, organisations and agents that exist over time in the social world.

To elaborate, the process of translation is examined through the study of Callon (1986) about the history of the scallop fishermen of Saint Brieuc Bay in France. Three marine biologists developed a conservation strategy to improve the decline of scallops in Saint Brieuc Bay. They successfully enrolled and mobilised other actors; scallops, fishermen, and specialists formed an alliance and they became their spokesperson. Law (1992) suggests that translation strategies are necessarily local, variable and contingent on the circumstance. Hence, Sarker et al. (2006) argue that translation can only be clearly understood when it is examined from the vantage point of a focal actor, because within an organisation multiple actors are initiating and engaging in translation with different interests. A focal actor is selected to

define identities and interests of other actors that are representatives of the focal actor's own interests. Importantly, punctualisation of actor-networks allows the focal actor to be different at different points of time during the process of translation. Law (1992, p. 5) explains that punctualisation offers "a way of drawing quickly on the networks of the social without having to deal with endless complexity."

The process of translation involves four main stages that interact with each other: (1) problematisation, (2) interessement, (3) enrolment, and (4) mobilisation (Callon, 1986).

4.2.2.1 Problematisation

During the problematisation stage, a focal actor initiates the process by framing the problem in its own terms and defining the attributes of other actors who are consistent with the interests of the focal actor. Then the focal actor starts enlisting other actors by demonstrating that it has the right solutions to the other actors' problems so as to render itself indispensable. This is achieved by the use of a set of unique and well-defined practices that are under the control of the focal actor. Callon (1986, p. 196) refers to these practices as "obligatory passage points" for problem solving. An obligatory passage point describes a situation or process that is defined by the focal actor, so that all other actors are satisfied with the interests attributed by the focal actor (Sarker et al., 2006). It is important to note that the focal actor is accommodated by the obligatory passage point and other actors must pass through the obligatory passage point by which the focal actor becomes indispensable.

4.2.2.2 Interessement

During the stage of interessement, a focal actor takes action to establish alliances with the other actors whose interests are consistent with the focal actor's own interests. When it is necessary, the action involves creating incentives for the actors in order to lock new allies into the network and strengthen the links between them. The process of interessement often involves negotiations among heterogeneous actors (Sarker et al., 2006). The actors do not necessarily participate in such

negotiations. A spokesperson or representative may negotiate on their behalf. When actors fail to act as promised by their representatives, betrayals occur.

4.2.2.3 Enrolment

If interessement is successful, enrolment takes place. Enrolment is the creation of an alliance network through a series of strategies which include "multilateral negotiations, trials of strength and tricks" (Callon, 1986, p. 211). The roles of each of the actors in the newly formed network are well defined, and an agreement among the actors is established. The actor-network grows with the success of enrolment.

4.2.2.4 Mobilisation

The final stage is mobilisation. A focal actor develops a set of methods to ensure that the allies are acting for the best interests of the alliance, and that they are not betrayed by the allies. "With allies mobilized, an actor-network achieves stability. This stability would mean that the actor-network and its underlying ideas have become institutionalized and are no longer seen as controversial" (Mahring, Holmstrom, Keil, & Montealegre, 2004, p. 214).

Recent ANT research has found that the four stages are more fluid and interrelated than Callon's translation model might suggest (Mahring et al., 2004). It should be noted that not all actor-networks go through all these stages and that the translation process may fail or end at any stage (Callon, 1986; Mahring et al., 2004). In examining the diffusion of management accounting innovations, Alcouffe et al. (2008) argue that the translation process works if the actor-network supporting the innovation represents in such a way that the solution is made acceptable by all members of the network. In other words, success and failure are only rhetorical constructions of the network that tie together many heterogeneous actors enrolled in the network. Table 10 summarises the central concepts of ANT.

Table 10. Working definitions of some of the central concepts of actor-network theory

Concept	Definition
Actor	Any element which bends space around itself, makes other elements dependent upon itself and translates their will into the language of its own (Callon & Latour, 1981, p. 286).
Actor-network	Heterogeneous network of aligned interests, including people, organizations and standards (Walsham & Sahay, 1999, p. 42).
Punctualization	Treating a heterogeneous network as an individual actor to reduce network complexity (Law, 1992).
Translation	The process of the alignment of the interests of a diverse set of actors with the interests of the focal actor (Callon, 1986).
Problematization	The first moment of translation during which a focal actor defines identities and interests of other actors that are consistent with its own interests, and establishes itself as an obligatory passage point (OPP), thus rendering itself indispensable (Callon, 1986).
OPP	The obligatory passage point, broadly referring to a situation that has to occur in order for all the actors to satisfy the interests that have been attributed to them by the focal actor. The focal actor defines the OPP through which the other actors must pass through and by which the focal actor becomes indispensable (Callon, 1986).
Interessement	The second moment of translation which involves a process of convincing other actors to accept the definition of the focal actor (Callon, 1986).
Enrollment	The third moment of translation, wherein other actors in the network accept (or get aligned to) interests defined for them by the focal actor (Callon, 1986).
Mobilization	The fourth moment of translation, during which the focal actor assumes a spokesperson role for passive network actors and seeks to mobilize them to action (Callon, 1986).
Inscription	A process of creation of artifacts that would ensure the protection of certain interests (Latour, 1992).
Speaker/Delegate/ Representative	An actor that speaks on behalf of (or stands in for) other actors (Callon, 1986; Walsham & Sahay, 1999).
Betrayal	A situation where actors do not abide by the agreements arising from the enrollment of their representatives (Callon, 1986).
Irreversibility	Degree to which it is subsequently impossible to go back to a point where alternative possibilities exist (Walsham & Sahay, 1999, p. 42).

Source: Adapted from Sarker, Sarker, and Sidorova (2006, p. 56)

4.3 Actor-Network Theory as a New Approach to Study of Power

Generally speaking, power is concerned with a person in authority who has "the ability to exercise power over" (Stanforth, 2006, p. 35). While discussing the paradox of power through the lens of ANT, Latour (1986) asserts that power must be

treated "as a consequence rather than as a cause of action" (p. 264). Latour further explains that one is said to have power only when he or she can obtain it from the others who are doing the collective action. In other words, "those who are powerful are not those who hold power in principle, but those who practically define or redefine what holds everyone together" (Latour, 1986, p. 273). When this notion of power is applicable to the study of the society, Latour (1986) argues, "Society is not what holds us together, it is what is held together" (p. 276). This is the collective action that holds the actors together to form the society that keeps them all in place. Collective action is obtained by enrolling many actors into the network which holds the society.

Likewise, Callon's (1986) translation model of power defines the notion of power as a consequence of an intense activity of enrolling, convincing and enlisting, not as a cause of people's behaviour. The model also explains "how a few obtain the right to express and to represent the many silent actors of the social and natural worlds they have mobilized" (Callon, 1986, p. 214).

It is of interest to look at the definition of *power* from other perspectives. Barnes (1986) offers the following definition:

> *Power is often thought of as the capacity to enforce one's will, to get things done, to press through a sequence of actions, even against opposition…. A power directs a routine, and directs it with discretion. This is the basis of power, the nature of the capacity to enforce something upon others.* (pp. 181–182)

Furthermore, Barnes (1986, p. 182) attempts to distinguish *power* from *authority* stating, "Whereas a power directs a routine with discretion, an authority directs it without discretion…. Authority, then, is power minus discretion."

From a different vantage point, Foucault's belief about power may provide significant knowledge in understanding power. Foucault[18] (1980, p. 89) contends that "power is neither given, nor exchanged, nor recovered, but rather exercised, and

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[18] For an extended view of Foucault's work of power/knowledge which has common themes with Latour's (1986) powers of association, see Foucault (1977, 1979a, 1979b, 1980).

it only exists in action." He further elaborates the meaning of power in an organisational context:

> *Power must by analysed as something which circulates, or rather as something which only functions in the form of a chain. It is never localised here or there, never in anybody's hand, never appropriated as a commodity or piece of wealth. Power is employed and exercised through a net-like organisation. And not only do individuals circulate between its threads; they are always in the position of simultaneously undergoing and exercising this power. They are not only its inert or consenting target; they are always also the elements of its articulation. In other words, individuals are the vehicles of power, not its points of application.* (p. 98)

Power is dispersed and pervasive in a web-like form that power exists through relationships between individuals. Foucault (1979b) believes that power is not a possession that is acquired, seized or shared, or something that one holds onto. Rather power is the result of a relationship and it became apparent when it is exercised. Power is not associated with any particular institution, but with practices, techniques, and procedures that give it effect. Power is present in multiple social relations. Hence, Foucault (1980, p. 154) views, "Power is exercised by virtue of things being known and people being seen". Knowledge is always a form of power, and knowledge can be gained from power, producing it, not preventing it. This is the Foucauldian perspective of power-knowledge.

Foucault (1977) states knowledge is power:

> *Knowledge linked to power, not only assumes the authority of 'the truth' but has the power to make itself true. All knowledge, once applied in the real world, has effects, and in that sense at least, 'becomes true.' Knowledge, once used to regulate the conduct of others, entails constraint, regulation and the disciplining of practice. Thus, there is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time, power relation.* (p. 27)

Wong (2007) further explains Foucault's concept of power-knowledge that there is internal relation between knowledge and power. In other words, there is a mutual production between knowledge and power – power produces knowledges and these knowledges produce power effects. If knowledge is internally linked to power, it is true knowledge, or truth, that produces power effects. Gordon and Grant (2005) add

that truth and knowledge are strategically constituted by the outcomes of power struggles.

Foucault (1979b) considers that power exists everywhere and comes from everywhere. It is a key concept because it acts as a type of relation between people, a form of strategy, with the ability to shape other people's behaviour. Foucault (1977) suggests that the effects of power should not be viewed negatively as power did not exclude, repress, censor, mask, and conceal. In fact, power produces reality or truth. Foucault (1977) believes that power has its effect on entire networks, practices, the world around us, and how our behaviour can be affected, not power itself. Foucault (1980) explains that specialised knowledge exist in some forms of power structures. For example, there is study of criminology because of prisons, and study of medicine because of hospitals. Possessing specialised knowledge allows the individual who possesses it, to have power over others.

When the concept of power-knowledge is applied to governmentality, it suggests that government is intrinsically dependent on particular ways of knowing – regulatory systems, processes and methods of translating into written formats (Townley, 1993). These methods include mechanisms for inscription, recording, and calculations such as in balance sheet, audits, population tables and censuses. Once the information in a particular area is inscribed, knowledge about it may be translated to other decision-making bodies. Therefore, knowledge is integral to the operation of power. Foucault (1980) wrote:

> *The exercise of power itself creates and causes to emerge new objects of knowledge and accumulates new bodies of information… the exercise of power perpetually creates knowledge and, conversely, knowledge constantly induces effects of power…. It is not possible for power to be exercised without knowledge, it is impossible for knowledge not to engender power.* (p. 52)

Foucault (1979b) argues that it is necessary to develop an analytics of power relations. In other words, instead of asking what power is, one must attempt to show how power operates in concrete and historical frameworks. The intended effects of such an analytic of power relations are to produce politically rationalities.

Accordingly, Foucault believed in possibilities for action and resistance – to recognise and question socialised norms and constraints (Gaventa, 2003).

Foucault (1977) considers power is also a major source of social discipline and conformity. Foucault acknowledges 'disciplinary power' that could be observed in the administrative systems and social services that were created in 18th century Europe, such as prisons, schools and mental hospitals. Their systems of surveillance and assessment no longer required force or violence, as people learned to discipline themselves and behave in expected ways.

Foucault (1977) applies the concept of power-knowledge to the nature of punishment, or what he calls discipline. The goal of punishment is correction which produces docile bodies. Therefore, prisons are developed to make individuals docile and useful and to transform their behaviour in accepted forms.

While discussing Foucault and ANT in relation to communities of practice theory, Fox (2000) suggests that ANT is built on Foucault's work on the conception of power relations. Foucault concerns the complex relations between power and knowledge whereby mechanisms of power produce different type of knowledge which collate information on people's activities and existence. The knowledge gathered in this way further reinforces exercises of power. Differently, ANT examines the power relations in the actor-networks where the actors are interacting with each other. A focal actor enrolls other actors and defines the obligatory passage point through which the other others must pass through, thus rendering the focal actor indispensable.

Both Foucault and ANT view that power is not a possession; power is an active, resistive or reactive force (Fox, 2000). Foucault recognises that power is not just a negative, coercive or repressive thing that forces us to do things against our wishes, but power can also be a necessary, productive and positive force in society (Gaventa 2003). Likewise, Latour (1986) states that power itself cannot be used to explain anything; rather power is explained by the action of the others who obey the focal actor. Gaventa (2003) suggests that the analysis of power could become the study of associations. Society, structure and power are established as actors are associated.

Those who are powerful are not those who "hold" power but those who are able to enroll, convince and enlist others into actor-networks which allow the focal actor to "represent" all the other actors.

To combine Barnes' (1986), Foucault's (1980) and Latour's (1986) assertions of *power* in an organisational context, *power* may be defined as *the capacity to enforce one's will as a result of relationships between actors*. Power cannot exist in its own right; power exists where actors are interacting, negotiating and adjusting.

To further the approach to study of power, Callon's (1986) and Latour's (1986) translation model of power extends the relationships between humans to include non-humans such as organisations, machines and technologies. This translation model explains the formation and breakdown of social order.

Callon and Latour's notion of power form a new approach to study power in the actor-network. Power relationships are often found in the social and natural worlds where "actors are defined, associated and simultaneously obliged to remain faithful to their alliances" (Callon, 1986, p. 214). In the broad sense, ANT explores the social effects of interaction between materials and strategies of an organisation (Law, 1992).

4.4   Critiques of Actor-Network Theory

Despite the increased application of ANT in the study of sciences and technologies, ANT has inherited a major criticism against the radical symmetry between human and non-human actors. Following the trajectory of ANT, it is argued that the uniqueness of humans would be lost and the status of human agent would be destroyed (Ashmore, Wooffitt, & Harding, 1994; Lee & Brown, 1994). The sociological boundary between human and non-humans, between the social and the technical has become undefined. Lee and Brown argue:

> *In other words, ANT is so liberal and so democratic that it has no Other – to paraphrase Rorty (1989), it has made itself into a "final" final vocabulary. We will argue that the success of ANT in challenging the human/nonhuman dichotomy is attended by a risk, one that arises with the stretching of the Nietzschean worldview and the discourse of liberal democracy to cover everything. ANT risks the production of yet another ahistorical grand narrative and the reproduction of the concomitant right to speak for all.* (p. 774)

In this view, ANT rejects the "dualist paradigm" (Ashmore et al., 1994, p. 737) and advocates the "principal of equality" (Lee & Brown, 1994, p. 775). Therefore, "the assumption of the ontological primacy of humans in social research and theory is suspended"; and "agency is no longer the sole preserve of humans" (Ashmore et al., 1994, p. 735). Also ANT challenges many common epistemological dichotomies by rejecting subject/object, culture/nature, and society/technology distinctions (Singleton & Michael, 1993; Williams-Jones & Graham, 2003). Actors are constituted in a heterogeneous sociotechnical network – partly connected by a set of relations, and partly embodied in a range of materials (Law, 1991). In other words, actors are partly social, partly technical, partly textual, partly relating to natural materials, objects and processes.

It is also suggested that ANT has focused on the description of networks and ignores the social and political context that would undermine the effective critique in these areas (Williams-Jones & Graham, 2003). ANT's emphasis on relational materiality has reflected an inadequate consideration of social structures, but this enables ANT to explore how the social relations are translated and performed in their particular contexts (Doolin & Lowe, 2002). Elder-Vass (2008) questions ANT which presents a *flat ontology* in two respects: neglect of realities beyond the empirical domain, and ignoring the existence of emergent social structures.

With regard to ecologising sociology, Murdoch (2001) compares ANT with Bloor's (1999a, 1999b) and Hacking's (1999) work. Bloor is concerned that a confined set of analytical categories of "relations" or "networks" does injustice to the causes of scientific belief and action. The attempt to blur the distinction between nature and society may lose the ability to explain beliefs about human actions towards nature (Murdoch, 2001). Bloor argues that "only by sustaining the distinction between

subject and object, and by driving a wedge between nature itself and descriptions of it provided by the knowing subject, can we highlight the problematic character of those descriptions" (p. 94).

Hacking (1999) questions whether all entities are equally open to processes of construction because humans are interactive and non-humans are indifferent. And this distinction is prominently exhibited in heterogeneous networks. He believes that both natural and social entities respond in different ways to their positions within networks. These differences cannot be simply explained by network relations. In fact, they are caused by the reflective abilities of human entities and these abilities are derived by social relations. Therefore, Hacking argues that human entities cannot be always thought of as potential "allies" to be enrolled in the networks. However, Callon (1986) has emphasised that the potential of betrayals or controversies in the network relations exists when the actors fail to act as promised by their representatives.

Accordingly, Murdoch (2001) contends:

> *The debate between Bloor (1999a, 1999b) and Latour (1999a) seems to indicate that we should either focus on the social and cultural processes that comprise human belief systems or examine decentred, heterogeneous networks in which non-humans may act more decisively than humans…. It is, therefore, worth considering, in drawing this section to a close, whether a 'middle way' between these two views is either achievable or desirable.* (p. 126)

In his conclusion, Murdoch (2001) suggests:

> *It might therefore be appropriate to place our study of particular 'ecologies' on a continuum, extending from those situations where 'social' (or 'interactive') factors are paramount to those where 'natural' (or 'indifferent') factors are decisive. The notion of a continuum is useful because it forces us to recognise that most cases will lie between the two extremes (as ANT forcefully argues).* (p. 129)

Interestingly, Murdoch's (2001) argument resonates with the subjective–objective debate within social science.[19] Murdoch's social-natural continuum spells out the importance of allowing flexibility from inter-disciplinary perspectives.

In spite of the criticisms, ANT has become a transportable theory that can be translated into many different disciplines of academic research (Doolin & Lowe, 2002). There has been a growing application of ANT on empirical inquiry into many different fields of academic research, such as science, sociology, computer science and medical technologies. ANT is a powerful research strategy as it provides an insight into the underlying relationships between resources and people within the ordinary society. ANT remains a formulated theory that provides a problem-solving description of networks that is a pivotal question in human and social inquiry. Practically, ANT takes an approach to explore the tension which is central to an actor-network involving human and non-human participants.

In addition, ANT provides a way of understanding about the origins of power and the structure of a network in which the actors collaborate, co-operate, compete and negotiate to form an actor-network system. ANT, which places emphasis on heterogeneous construction of networks, is well suited to the generation of detailed and contextual empirical knowledge about accounting. Power relationships exist in the budget setting process and ANT could provide an explanation as to how the mechanism of power is created in an organisation. The budgetary process can be seen as a negotiation process by which various actors collaborate and transform each other to rally resources. Under the theoretical framework of ANT, this study attempts to explore the phenomenon of interconnection between humans and non-humans in the budgetary process. By engaging with the budgetary process in the school sector, ANT might well find powerful answers to the research questions and unfold the others as yet unasked.

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[19] For details, see Morgan and Smircich (1980).

4.5　　Actor-Network Theory in Management Accounting Research

Increasing attempts have been made by researchers to extend ANT's applications beyond technology adoption and design to wider fields (Gao, 2005; Walsham, 1997). The work in ANT has, therefore, begun to influence conceptions of social order in cultural and political studies (Ashmore et al., 1994). Particularly, there have been growing developments in the research application of ANT in accounting studies.

Ezzamel (1994) employs Foucault's framework of power/knowledge and the sociology of translation of ANT to analyse the failure of organisational change in a UK university facing a financial crisis. Ezzamel provides an explanation and understanding of how the opposition group "problematized the issues, established themselves as the focal point of resistance, and effectively enrolled and mobilized allies" (p. 237). Chua (1995) explores the introduction of the casemix management information systems in three Australian hospitals as a socio-technical expert system that is developed with the establishment of the actor-networks that create it. Lowe (1997) examines the developments of casemix and related information systems at a large region hospital, Health Waikato in New Zealand. Drawing upon the sociology of translation, Lowe concludes that the bringing in of technologies and machines (i.e. accounting technology – the blood products cost information system) by the human actors could create a stronger network to influence decision makers within the health institution. Singleton and Michael (1993) use ANT to show how general practitioners problematise their own roles and the black-boxed status of the cervical smear test within the UK Cervical Screening Programme network. Drawing upon the actor-network perspective on translation, Madon, Sahay, and Sahay (2004) discuss the process of property tax reforms. Using ANT, Alcouffe et al. (2008) examine the diffusion of two accounting innovations – activity-based costing and the Georges Perrin method – that have had different fates in France, one of success and one of failure. They conclude that attention should not be focused on the concept of success/failure but on the dynamic of the networks that support the innovation, i.e. the enrolment of human and non-human actors, allies and spokespersons.

4.6   Conclusion

This chapter delineates ANT, which forms the theoretical framework of this study and formulates a set of explanatory concepts to the phenomenon being studied. ANT's weaknesses are also discussed, particularly on the abandonment of boundaries between human and non-human entities. Drawing on the ANT model and the themes of the past studies, this study seeks to describe and explain the interactions between human and non-human participants in the social contexts in which accounting technology shapes organisational processes, actions and control in particular ways. ANT appreciates the inter-relationship between human and non-human actors aiming to establish a socio-technical actor-network to maintain them and to explain how power is distributed and managed. Through the examination of budgeting as a technology, the study attempts to understand the relationships between humans and non-humans in schools. Latour (1987) suggests that in order to better understand the nature of a technology, the processes involved in its fabrication should be examined. The technical artefacts (in this case, they include accounting technologies, budget documents, policies and procedures) are the results of the process of fabrication. This study also attempts to examine how accounting and budgeting systems are operated together, constructed and interpreted by the participants.

CHAPTER FIVE
BACKGROUND TO THE THREE SCHOOLS

5.1   Introduction

This chapter provides an account of the three schools being studied. Their profile, hierarchical structure, and deliberations and determinations of the actors in making budgetary decisions are delineated. The interrelations between actors are also described. For the purpose of confidentiality, their identities are named as Robin, Tui and Kea. The gender of some of the informants was also changed to protect their privacy.

5.2   School Robin

In undertaking the study of School Robin, the researcher employed a participant observation approach for the longitudinal collection of data over five years from 2006 to 2010. During the period of study, the researcher was working as the Finance Manager at School Robin. The researcher had direct involvement and participation in five consecutive annual budgetary cycles. Notes were taken about the day-to-day activities of the people being observed, and countless documents were studied.

Particularly, frequent contacts with the Board Chair, the Principal, the senior management team and the middle managers who were the main actors in the field were made possible because of the researcher's work relations. Through personal experience, participant observation has helped in uncovering the interactions among them and provides a thorough understanding of the research problems that have been known. School documents were also studied which supplemented the missing blocks of details from observation.

5.2.1 School Profile

Established in 1950s, School Robin is a decile 2, co-educational secondary state school located in Auckland. The school is sited on 14.5 hectares of land and buildings. Over the years, school facilities were added, upgraded and modernised to meet the rapidly changing technology, such as a library suite, an information centre, a commercial kitchen, a restaurant for assessment, a metal workshop, a woodwork room, two gymnasiums, a music suite, and a dance studio.

During the period of study, it had an average roll of 1,200 for students from Year 9 to Year 13, and 7 international fee-paying students. The ethnic components were Māori 52%, New Zealand European 26%, Samoan 8%, other Pacific 4% and other 10%. Fifty percent of them were boys and fifty percent were girls. The school employed about 85 teaching staff and 45 support staff. The achievement of individual students and groups of students, particularly in academics, sports and cultural activities, was highly acknowledged by the school and the community.

In addition, School Robin had a Special Education Unit attached to it. The Unit accommodated 20 students with learning impairments. This unit was separately funded by the government through the Ongoing Renewable Resourcing Schemes in accordance with the degree of the students' health need.

In addition, there was an English for Speakers of Other Languages (ESOL) Centre which catered for not only international students, but also migrants and refugees who were coming from non-English speaking backgrounds. The Centre helped students communicate confidently in English and cope with the mainstream curriculum.

The introduction of *Tomorrow's Schools* in 1989 had shifted the school management to School Robin. The governance role was vested in the Board of Trustees (the Board) which included the Principal, five parent representatives, a staff representative, and a student representative. In addition, the Board was strengthening its governance role through a partnership with two prominent companies which provided personnel to act as co-opted members in the Board.

The Principal was charged by the Board with day-to-day running of the school. The steering mechanisms, including the school charter, the National Education Guidelines, the National Administration Guidelines, education reviews and financial audits, were directed by the Ministry of Education. School policies and procedures were put in place to guide School Robin in day-to-day administration and management. They were formulated under the five National Administration Guidelines: (1) Curriculum, (2) Self-review, (3) Personnel, (4) Resourcing, and (5) Student Health and Safety. Through the official rhetoric of these controlling mechanisms, School Robin had taken the responsibility of accountability for the school resources funded by the government.

School Robin was bulk-funded by the government through operations grants, which excluded teacher salaries and capital expenditure. The operations grants were made to the school by four quarterly instalments during the year – January, April, July and October. School Robin made its operating decisions on how the resources were allocated to achieve the annual targets set in the school charter and to meet the Government's national education goals.

In the early 2000s, after the recovery from the Asian Financial Crisis in 1997, the industry of international education had become a windfall gain in the school sector. School Robin enjoyed the benefits from the booming international education. At one time, it hosted more than 30 international students who brought more than $300,000 additional income to the school. This windfall gain was later invested in the school facilities.

Unfortunately, the appreciation of the New Zealand dollar and the bad publicity of the country regarding pastoral care of overseas students caused a significant decline in foreign fee-paying students since 2003. Between 2003 and 2005, the number of foreign fee-paying students in the country decreased by approximately 31.5 percent which is equivalent to 4,752 students.[20] Under this adverse circumstance, School Robin suffered from this downturn and the number of international students dropped from 30 to 7 during the period of study. Since the buffer of additional revenue

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[20] For details of the statistical information on international students, go to www.educationcounts.govt.nz

derived from the international students disappeared, School Robin had adopted a very conservative approach in budget setting.

5.2.2 Organisational and Management Structure

Generally speaking, the Board was responsible for the governance of the school. A number of committees were set up with a designated advisory role to the Board. They were:

- the Finance Committee, responsible for overseeing the school's financial management, and reviewing financial policy and procedures;
- the Property Committee, responsible for maintaining the school grounds, buildings, plant and equipment; and
- the Discipline Committee, dealing with disciplinary matters with the students and staff members.

The Principal had delegated authority from the Board to implement the policies and procedures and to carry out the strategic and day-to-day management decisions of the school. The Principal then sub-delegated in part his authority to the Associate Principal, three Deputy Principals and the Finance Manager in accordance with their functional duties. This form of delegation of authority was structured to ensure that consistency across the school was maintained and was appropriate. Accordingly, a senior management team (SMT) comprising the Principal, Associate Principal, three Deputy Principals and the Finance Manager was established to make both operational and strategic decisions.

An additional middle-management tier was created. They were called the Curriculum Administration Managers (CAMs) which included the Heads of Faculty, Heads of Department, and Heads of Learning Area. The areas they were in charge of were treated as a responsibility centre. The CAMs were predominately accountable for both academic disciplines and budget management within their responsibility centre. They also directly reported to the Principal. This structure enabled both the SMT to control spending at the macro-level and the CAMs to supervise the

classroom-based teachers. The management structure and roles of the SMT is depicted in Figure 4.

To the CAMs, the additional management responsibility had a significant impact on their traditional roles. Ironically, the teaching professionals had increased accountability for spending rather than educational achievement. Under the structural reform, the teaching professionals were required to have both teaching skills and managerial skills.

5.2.3 Financial Resources

As a state school, School Robin's main source of income was derived from the government funds in the form of operations grants and teacher salaries. Teacher salaries were paid directly by the Ministry of Education in accordance with the staffing entitlement. The amount of operations grants received each year largely depended on the number of students enrolled at each year level. Based on the decile rating funding formula, the low decile schools like School Robin generally receive more government funding than high decile schools.

There were two Roll Returns required to submit to the Ministry of Education every year − 1 March and 1 July. The 1 March Roll Return determined the level of operations grant received for the current year. The 1 July Roll Return was used to apply for new entrant adjustment between the period of March and July. Therefore the March Roll Return was a crucial cut-off point which had a significant impact on the amount of the operations grant received for the current year.
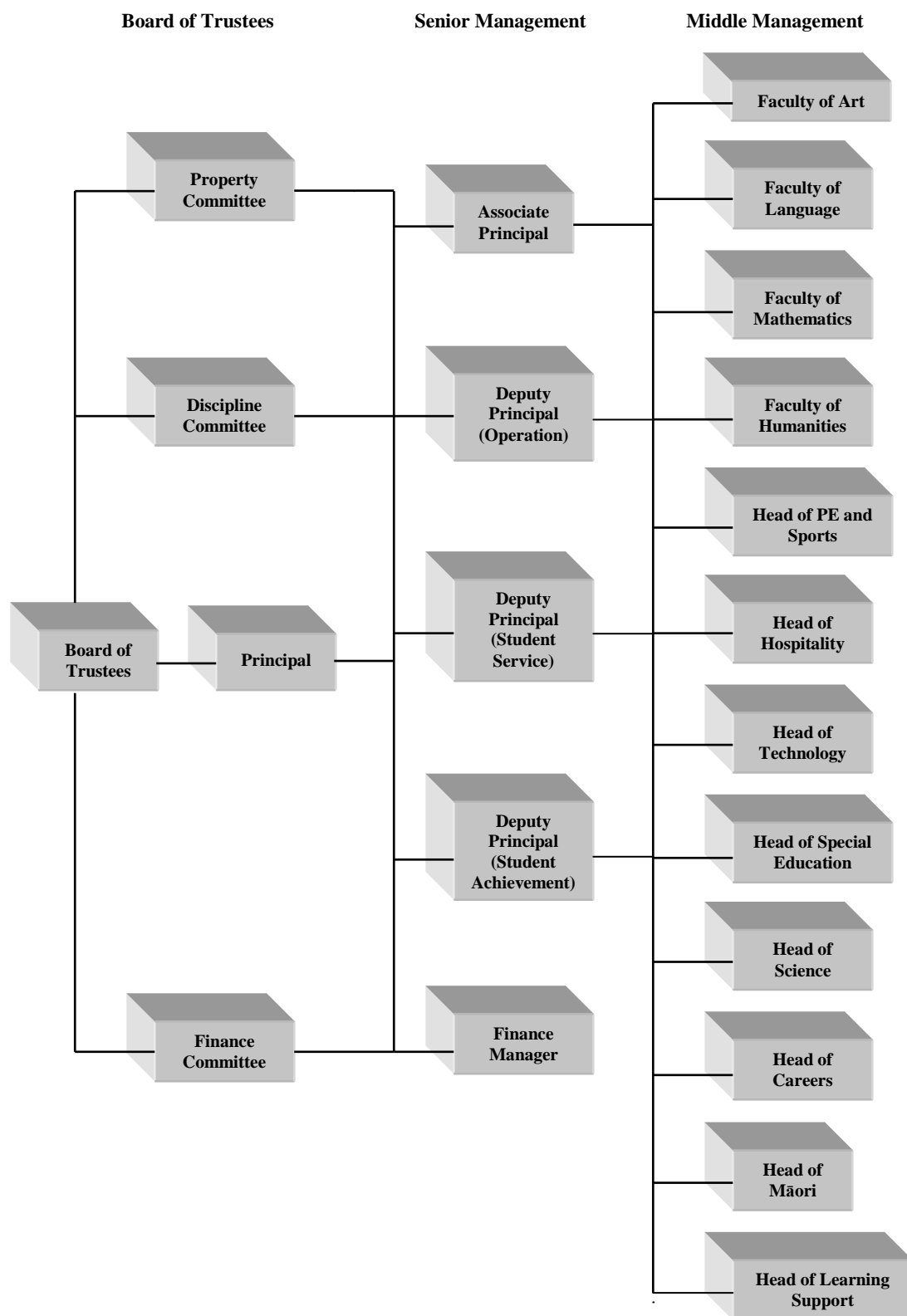
Figure 4. School Robin organisational chart 2007

Note: Some details and titles have been amended or omitted to protect
organisational confidentiality.

Under the principle of self-management, School Robin controlled the operations grant on staffing, learning resources, administration, property and ICT costs. Teacher salaries were directly funded based on staffing entitlements driven by the number of enrolled students. The amount of teacher funding was made up of three components:

- Curriculum staffing
- Management staffing
- Additional guidance staffing

As such, the costs of additional teachers over the staffing entitlement were self-funded, i.e. paid out from the operations grant. It provided flexibility for schools to employ additional teaching staff to meet the needs of the students.

Income was also derived from contestable Ministry of Education funds and service contract fees with other government authorities. Examples of these contestable funds are Te Kotahitanga, ESOL grants, and the Ongoing and Renewable Resourcing Scheme. Service contracts included numeracy projects and student health assessment programmes. Locally raised funds were mainly generated from the international fee-paying students, parent donations, trading activities, school activities, and local grants such as Gateway[21]. Between 2006 and 2008, locally raised funds contributed to 24–28 percent of the operations grant.

Generally speaking, the fixed costs of running a school were substantial. The fixed costs included support staff salaries, power, water, telecommunication, property repairs and maintenance, and administration consumables. During the year of 2008, the cost of support staff, additional teacher salaries and other fixed costs was $1.7 million which came to more than 85 percent of the operations grants received. Therefore, the amount of discretionary spending that remained was too slim to

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[21] Gateway programme is funded by Tertiary Education Commission. The Gateway programme strengthens pathways for students from school to further education and training or employment. Senior secondary students (Year 11 to Year 13+) in the Gateway programme undertake structured workplace learning across a range of industries and businesses around New Zealand, while continuing to study at school. All state and Integrated secondary schools are eligible to apply for Gateway.

achieve all of the school's initiatives. Table 11 provides breakdowns of income and expenditure for the years from 2006 to 2008. Table 12 summarises the financial performances from 2006 to 2008.

Table 11. School Robin's breakdowns of income and expenditure (2006–2008)

School Robin	2006	2007 [1]	2008 [1]
Decile	2	2	2
Roll	1,253	1,194	1,101
International Students	7	6	7
Income			
Operations Grant	2,113,437	2,018,836	2,056,573
Teacher Salaries	5,415,648	5,233,510	5,394,471
Other Government Grants	734,223	651,957	621,128
Local Funds	511,896	562,482	483,777
Interest	63,994	82,743	141,365
Use of Land and Buildings Grant	-	1,158,044	1,124,365
Gain on Disposal	-	1,330	-
Expenditure			
Learning Resources [2]	6,503,574	6,143,644	6,420,528
Administration	957,802	936,532	1,020,409
Property [3]	1,230,757	1,880,085	1,836,537
Local Funds	167,744	148,553	151,976
Depreciation	261,086	276,189	294,549
Amortisation of Software	-	13,348	17,313
Finance Costs	-	17,746	16,236
Loss on Disposal	-	-	14,970
Net Surplus/(Deficit) for the year	(281,765)	351,804	49,341

[1] Annual financial statements comply with NZ IFRS.

[2] Learning Resources includes teacher salaries.

[3] Property includes the notional lease cost of land and buildings owned by the Ministry of Education under NZ IFRS.

Table 12. School Robin's summarised financial performances (2006–2008)

Year	Reported Surplus / (Deficit)			Reported Cash and Investments		
	Actual	Budgeted	Variance	Actual	Budgeted	Variance
2006	(237,520)	($277,960)	40,440	529,621	520,000	9,621
2007	351,804	25,200	326,604	1,080,444	582,400	498,044
2008	49,341	16,000	33,341	1,383,085	1,071,400	311,685

Year	Reported Working Capital			Reported Non-Current Assets		
	Actual	Budgeted	Variance	Actual	Budgeted	Variance
2006	707,275	297,024	410,251	2,603,407	2,616,361	(12,954)
2007	1,062,919	573,320	489,599	2,666,971	2,701,560	(34,589)
2008	1,150,798	1,044,016	106,782	2,699,342	2,701,600	(2,258)

5.2.4   The Process of Budget Construction

Devolution of financial management to the school level had created the school-based management. To carry out the school-based management, school-based budgeting became a pivotal financial instrument to direct School Robin in allocating resources. All staff members were made aware of the importance of the school's annual budget. The school's discretion on spending and its control was exercised through the budget management with the use of accounting technologies.

School Robin's direction and purpose was established through the school charter, which was a three-year strategic plan that spelt out the school's strategic objectives. To achieve these objectives, an annual achievement plan and annual targets were set. The annual targets were formulated by the Principal and his SMT and approved by the Board. Generally speaking, the annual budget reflected the financial priorities for attaining the annual targets.

In fact, the operations grant created flexibility for School Robin to operate within resources. This, in turn, gave rise to a need for budget controlling. School Robin, therefore, required robust monitoring mechanisms to make sure spending was within budget throughout the year. The annual budget had become a powerful document to legitimate the actions of spending and control. Notably, School Robin was reliant on the accounting technologies to formulate the budget and monitor spending within budget.

The budget construction process for 2007 was described as pseudo-participation at the budget holder level. The budget prepared by the budget holders was often subject to adjustments by the Principal without any consultation with the budget holders or requesting further details about the budget figures proposed by them. The Principal made the final decisions on budget allocation according to his judgement.

5.2.4.1   Budget Cycle for 2007 – Controlling

The budgetary monitoring system in School Robin was based on financial information disseminated to the CAMs who were responsible for managing the allocated financial resources. This section describes, in summary, the budget construction for 2007 which began in October 2006. The researcher gathered indirect or secondary knowledge from internal documents and collected data from informal communication channels and her involvement in the budgetary process.

In October, when the provisional operations grant was notified, the process of budget setting started. The Finance Manager was accountable to the Principal for preparing an annual budget.

Firstly, the anticipated revenue for the following school year was forecasted. The components of revenue were mainly:

- Government grants
- Teacher salaries
- Local funds

- Interest

Government grants comprised the operations grant and income received from other government initiatives. Teacher salaries were both a revenue and expenditure item that was outside the control of the school, except the banking staffing.[22] Locally raised funds included mainly the parent donations, sponsorships, school activities and trading income. Parent donation was a voluntary and unenforceable stream of revenue that was difficult to forecast. The budget for parent donations was reflective of historical trends only. Since the percentage of parent donations ($26,000 in 2007) over the total revenue (excluding teacher salaries) was less than one percent, the uncertainty of parent donations had no substantial negative impact on the school revenue as a whole.

Interest income was entirely the interest earned from the term investments at the bank. Cash was managed in a position to meet the payables, tax payments and other daily expenses. Conservatively, surplus funds were invested at the bank for short-term investments only. After the revenue had been forecasted, total expenditure was determined through the budgetary process.

Next, the CAMs were provided with a budget working pack. Inside the pack was the budget information of the past two years which formed the baseline for the CAMs to propose operational budgets and capital requests for the following year. With regard to capital requests, the CAMs were free to submit their *wish list* that they believed would assist them in delivering curriculum. According to their past experience and learning plans, the CAMs proposed a budget on the line-by-line classes of expenditure, and estimated the income recoveries from subject fees, etc. Subject fees were charged to students on those subjects that involved take-home materials, such as art fees and technology fees.

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[22] Banking staffing gives boards some flexibility in timing the use of staffing entitlement. Schools can in one year choose to: (1) anticipate up to 10% of their staffing entitlement – using it in advance or going into overdraft; (2) save up staffing to use later in the year – under-using or banking; (3) operate staffing usage on a full year basis – no saving and no overdraft in each pay period.

Thirdly, after the proposed budgets had been received from all budget areas, the Principal would go through all of them himself. He believed that the involvement of budget holders in the budget setting process was a kind of prima facie democratic management exercise, and the Principal, who was accountable to the Board, should take control of resource allocation decisions. He would then exercise his judgment to increase or decrease the level of budget requested by various areas under the precept that the resources were allocated to the maximum use of achieving the annual targets. When the Principal completed his adjustments, the Finance Manager entered the budget data into the accounting system, and the draft of the annual budget was generated. The draft was revised until the Principal was satisfied with the net operating figure. The budget was then submitted to the Board through the Finance Committee for approval. It was seen that no consultation with the budget holders was exercised during the process of budget adjustments and the budget holders would not be informed of the final budget until it had been approved by the Board.

5.2.4.2 Budget Cycle for 2008 – Participative

The 2008 budgetary process began in November 2007 with the delivery of an instruction from the Finance Committee that a deficit budget would not be accepted in view of reporting a history of recurring operating deficits and the continued decreasing roll. At the least, a break-even budget after depreciation was required. This instruction had put pressure on the Finance Manager and the Principal. After a number of discussions between the Principal and the Finance Manager, it was decided that cost cutting across all budgetary areas was necessary.

In view of decreasing income commensurate with declining roll, achieving a balanced budget was a challenge and it required the support from the budget holders and staff members. The Finance Manager decided to take a greater degree of stakeholder participation in all stages of the budgetary process. The inputs from budget holders were incorporated in formulating the budget. The budget holders were also requested to provide an explanation for an increase or decrease of budget request compared with that of the previous year. The explanations given by the budget holders included: a change of curriculum, an increasing number of

enrolments in particular subjects, meeting the needs of the students, and coping with the demand in the labour market. These explanations were useful in adjusting the budget requests when necessary. The Finance Manager also initiated discussions with the budget holders about the selection of suppliers who would bring the most cost-effective outcome. Negotiations, adjustments and counter claims were undertaken among the CAMs, the Finance Manager and the Principal. The Finance Manager also maintained dialogues with the budget holders in order to disseminate information and receive feedback.

With little room for a budget increase in some areas, there were two possible ways to adjust the budget while keeping the global budgeted operating figure unaltered:

- Within a responsible centre, a budget increase in an expenditure item was balanced by a decrease of the same amount in another expenditure item; and/or
- Among a number of responsible centres, a budget increase in a responsible centre was balanced out by a decrease of the same amount in other centres.

Staffing was the other area to consider for cost cutting. To avoid any necessary redundancies and minimise the impact on staff morale, cost-cutting initiatives were attempted including reducing the support staff work hours across the board and employing fewer additional teachers who were working under a fixed-term contract. With the objective in mind, a number of consultation sessions with the affected staff were undertaken. The Finance Manager who was managing the support staff interviewed the affected support staff individually, listened to their concerns, and accepted their counter-offer in a condition that would not compromise the outcome of the cost-cutting exercise. Although negative comments and resistance from the staff members were anticipated, they were managed with care and diligence. Counselling and referrals were offered to those staff members who found it difficult to adjust their financial situations.

After tedious efforts, the 2008 budget predicted an operating surplus of $16,000 which was favourable to the Finance Committee's contemplation. The "very final"

annual budget was formalised and submitted to the Finance Committee for approval and then to the Board for ratification. At this stage, the annual budget was a conforming document that held each budget holder accountable for every dollar spent. School resource distribution, management and monitoring were closely supervised in a centralised and hierarchical structure through the Finance Committee, the Principal and the Finance Manager. The Board retained a monitoring and governance role.

5.2.4.3   Budget Cycle for 2009 – Aggressive

The operating result for 2007 and 2008 reported a surplus that was favourable to the budget. With the tight budgetary control put in place for the previous two years, School Robin accumulated a substantial amount of school reserves. The Principal seemed to be satisfied with the school's financial situation. In contrast to his conservative approach over the past years, the Principal proposed a deficit budget to the Finance Committee. In defending the proposed deficit budget, he presented the following justifications:

- The financial position was sound and healthy, given the decent amount of cash reserves.
- The deficit budget included the depreciation expense which was not a cashflow item.
- The employment of three additional teachers was essential to implement the small class initiative[23].
- The school reserves should be redirected to educational needs for the long-term benefits of the students.
- The Ministry of Education would question the intended future use of the cash reserves.

The Principal's proposal was unanimously approved by the Finance Committee and ratified by the Board without challenges. Although the roll was forecasted to decline in 2009, the budget for all responsible centres basically remained unchanged at the

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[23] To reduce the class size from 30 to 28 students.

previous year's level. The budgetary process for 2009 was less exhaustive compared with that in the previous years. The approach of needs-based budgeting for 2009 was obviously inconsistent with the conservative approach adopted in the past years. The rationale behind the Principal's attitudinal change in budgeting will be further explored in sections 5.2.7 and 5.2.8.

Eventually, a deficit budget of $283,400 for 2009 was approved and no dissension was encountered.

5.2.5 Budgetary Control

Over the years, inadequate government funding had become a common agenda in the boardroom discussion and School Robin had no other alternative but to live on a tight budget. The low percentage of locally raised funds received hardly eased the financial constraints. Furthermore, the parents' involvement in fundraising activities was not popular, which imposed a limitation on generating streams of revenue. The ongoing tight budget put a constraint on spending on items which were outside the core education curriculum.

Control and monitoring of the budget was achieved through the monthly reporting system to the Finance Committee and the Board. Budget variances required an explanation from the budget holders. This formed a recurring theme of boardroom discussions in the Finance Committee. The questions asked tended to be about overspending, rather than about quality and effectiveness in curriculum delivery.

The Finance Manager was responsible for presenting the monthly financial statements and management reports to the Finance Committee and answering queries relating to financial issues. These reports had been redesigned to provide more detailed explanations of key significant budget variances and follow-up actions to be taken. In relation to curriculum areas, the CAMs were rarely asked to attend the Finance Committee meeting to discuss any issues or concerns about budget management. Instead, the Principal answered those queries in accordance with his knowledge as far as possible. When further confirmation was required, the Principal

would report back at the next meeting. So far during the period of study, the work relationship between the Principal and the Finance Committee was collaborative, which was vital to support the Committee's roles of governance and accountability.

With regard to top-down budgetary control, budget holders had delegated authority to spend up to a maximum of $500 within budget. When the spending was over and above this threshold, it required the approval from either the Finance Manager or the Principal. If the spending exceeded the Principal's delegated authority, which was set at $10,000, it required the approval from the Board Chair. The budget holders strictly adhered to their delegated authority.

The budget holders received reports on the performance of their responsible centre against the annual budget on a monthly basis. Expenditure over budget would require an explanation to the Principal. The concerned budget holder would be issued a memorandum with signatures of the Principal and the Finance Manager. In a situation which warranted close attention, the Finance Committee would be presented with a copy of the memorandum issued.

For management purposes, the annual budget was reviewed between July/August by making comments and explanations on those areas with significant variances. Those budget areas with negative variances would be monitored closely for the rest of the year. The Finance Manager and the concerned budget holders met regularly to find ways of putting the budget back on track. The original budget would stay until the end of the financial year for performance evaluation.

5.2.6 Management Style on Budget Decisions – Highly Centralised

The Principal of School Robin had been in his position for more than ten years. His long-term involvement in the school's financial management had enabled him to be conversant with the budget setting process. During the budgetary process, he worked closely with the Finance Manager.

The falling roll had put a lot of financial constraints on the budget. School Robin took a very conservative approach to financial management. The conservative approach was manifested in the manner by which the Principal was manoeuvring resource allocation and making budget decisions, particularly during the budget cycle for 2007.

In terms of management style, the domination of the budgetary process by the Principal might be attributed to a number of factors, including:

- The devolved budget available to the school was too tight to allow for strategic initiatives.
- The timeframe for budget approval constrained the process of negotiations.
- The centralised management style of the Principal maintained controlling power over the budget.
- The involvement of participative budgeting was limited.
- The Principal, through his long tenure in the school, was the best informed person as to the school's need for raising student achievement, and exercising power over information and resources.
- The annual budget was viewed as an instrument of external legitimacy to retain power.

The Principal's highly centralised management style could be illustrated by a number of instances:

(1) Quasi-Delegation of Authority. Apart from the designated responsibilities, authority delegation to senior management members was uncommon. Thus the members of the SMT were reluctant to make their own decisions in the Principal's absence. They learned from their experience that their decisions would be eventually overturned by the Principal upon his return. In one adverse incident described in the following paragraph, the school had been criticised by a government agency that this approach was poor management and lacking of communication among the management team.

The Principal delegated the authority to the Finance Manager to make the decision on whether the school should enter into an agreement with a government agency for employing a young man with disabilities to work in the school's library. Having considered the subsidy offered and the minimal cost to the school during the two-year term of agreement, the Finance Manager decided to enter into the agreement and informed the Principal of his decision. When the agreement document arrived and required the Principal's signature, the Principal decided not to proceed with the employment. During a meeting with the employment agency who arranged the work placement, the Principal argued that the staffing in the library would be excessive if the person was employed given the prevailing dropping roll. The employment agency wrote a letter to the school Board and challenged the Principal's action which had overruled the Finance Manager's decision and breached the verbal contract. The Board supported the Principal's decision and replied back to the employment agency articulating the school's stance of not participating in this programme due to drops in both school roll and staffing level. Shortly afterwards, the government agency wrote a letter to the Board to express their concerns on this issue and stressed that School Robin would not be considered for the work placement programme in the future.

Indeed, the Principal's inconsistency in decision making had embarrassed the school and caused damage to its reputation. The action taken in this instance has also created a contradictory approach to delivering special programmes in its Special Education Unit.

(2) Preferential Resource Allocation. Learning areas such as Sports and Hospitality which had successful records of student achievement were comparatively allocated more financial resource to encourage student participation and raise their achievement. However, this resource allocation strategy was not articulated in the strategic plan.

For Sports, funds under the Principal Discretionary budget were set aside to finance the sports teams in tournaments. Financial assistance to individual sports players would also be considered on a case-by-case basis.

Hospitality was allocated a greater proportion of capital budget for purchasing quality kitchen equipment and modernising the restaurant for training purposes. This decision was considered to be strategically oriented but financially undesirable. In addition, this learning area was given a higher degree of tolerance in spending above budget. In effect, Hospitality enjoyed the preferential deliberations over the contestable financial resources. This approach supports the theory that more resource tends to be allocated to those areas of high achievements.

On the contrary, the ESOL Centre received little attention due to its minimal records of student achievement. The ESOL Centre accommodated not only international students but also migrants and refugees for learning English. The learning resources in the Centre were too outdated to attract international fee-paying students, and the number of international students dropped from 30 to 6 over the past three years. To make thing worse, the Principal was reluctant to invest in renovating the classrooms and upgrading the computing equipment. The physical learning environment looked old-fashioned. The Principal understood that international fee-paying students could generate additional revenue to fund school-wide programmes and activities. His personal preference seemed to take precedence over his rational decision making.

(3) Gaining Support from the Board of Trustees. School policies and procedures were compliant documents which provided the Principal with legitimate power in the process of staff discipline. This was concluded by the observed frequency of issuing internal correspondence which highlighted the importance of following the school policies and procedures for responsibility and accountability reasons. To gain support for his power and authority, the Board and its committees were also given copies of his communications with staff in these instances.

The Principal was conversant with the policies and procedures and expected every staff member should follow suit. Despite the fact that the school policies and procedures were accessible to staff members in forms of hard copies and electronic copies, staff rarely made reference to these policies and procedures. They presumed that the written communication from the Principal was a ritual action because there were no consequences for not following policies and procedures.

(4) Knowledge and Power. In relation to budgetary control, accounting technology was a financial tool to legitimise authority and power within the school. The focus on "spending within budget" manifested itself by means of various internal communication channels.

In instances requiring a budget holder's explanation for overspending, the Principal sought information and support from the Finance Manager to substantiate his justification. It was observed that the internal communication with both signatures of the Principal and the Finance Manager issued to the budget holders was frequent. This co-signature tactic was intended for strengthening the effect of power and authority. Whether this tactic was effective or not was not the main concern; at least the challenge came from the senior management who possessed knowledge and power.

(5) Non-Strategic Focus. A focus on the operating budget took precedence over strategic goals. The strategic goals were not always pervasive in determining decision outcomes during discussion in the boardroom. Most often, the Board and its committees' deliberations were directed by the Principal who informed the Board of the school performance and his actions in dealing with management issues. The board members, including the Board Chair, remained quiet and generally asked very few questions about the Principal's actions.

In regard to financial management, the focal concern of budgetary control deliberations by the Board and the Finance Committee emerged as repeated and continued efforts to spend within budget. Deliberations on generating income and other financial management issues were rarely an agenda in boardroom discussion and determination.

To achieve a break-even budget, the most detailed discussion and debates that occurred at the Finance Committee were:

- reducing support staff's work hours;
- trimming the operating expenses;

- cutting programmes available to students;

- reducing the extra-curricular activities; and

- drawing school reserves for financing the shortfall.

To arrive at a resolution, some of the above areas had to be compromised. This resulted in setting strategic limits to some achievement targets. Apparently, budgetary decisions were made with little regard for the strategic goals set in the charter.

(6) Dominance in Decision Making. Persons affected by the decisions were not always provided with opportunities to voice their concerns. There was an instance of disagreement between the Principal and the Head of Mathematics in relation to the furniture requisition for new classrooms. They had different perspectives on the type of furniture to be placed in the classrooms. Though the Head of Mathematics won in this battle, the Principal was not comfortable with this decision. In fact, there were only a few individuals who dared to challenge the Principal's decision. It appeared that the Principal failed to acknowledge the principle of *Tomorrow's Schools* that it intends to shift the power to those people who are close to the students to make the best decision, i.e. the Head of Mathematics in this incident.

The Associate Principal was supposed to assume the Principal's duty during the Principal's absence. Because of his desire for controlling decision making, the Principal was reluctant to delegate his duties to the Associate Principal during his absence. During the period of this study, the Principal was seldom absent for more than three days at one time. Any big decision making such as contract execution would be deferred until his return. It became apparent that the role of the Associate Principal could never be realised. This had created personal conflicts and an untrusting relationship between the Principal and the Associate Principal. The actions undertaken by the Associate Principal were very often challenged by the Principal. Eventually, their work relationship ended with the Associate Principal's resignation in 2008.

To sum up the above instances, the Principal's dominance in decision making in every aspect had discouraged the management staff from making their own decisions even within their jurisdiction. The Principal had become the final decision-maker on all issues from day-to-day operating to long-term strategic decisions. This high level of centralised management style had created inflexibility, pressure and control exerted on staff members. It would demoralise staff and cause inefficiencies by diminishing the school's ability to react to changing external circumstances.

5.2.7   Board Relationship

Up to 2008, the relations between board members were generally collegial and collaborative. Over the past 10 years, the Board Chair devoted himself to support the Principal's strategic deliberation and determination in all aspects. This tradition changed in the latter part of 2008. Three board members resigned and a by-election was necessary to recruit members to fill the vacancies. Since the new members came on board, the Principal had lost support from the board members as a whole. The boardroom tradition of collaboration and loyalty to the Principal no longer existed.

5.2.7.1   Board Relationship up to 2008 – Collaboration

During the boardroom discussion the board members usually exhibited co-operation and support to the Principal from strategic decisions to management issues. The board meetings tended to be dominated by the Principal who reported to the Board and was asked few questions from the Board. The Principal regularly presented at the board meetings his monthly written report which evaluated the school performances under the six National Administration Guidelines (NAGs): (1) Curriculum, (2) Self-review, (3) Personnel, (4) Financial and Property Management, (5) Student Health and Safety, and (6) Legislative Compliance.

Apart from a written report, the Principal often presented his strategic initiatives or proposals verbally in anticipation of obtaining approval from the Board without reading a formal report. The full support from the Board and its committees was symbolised by unanimously voting for the Principal in most of the cases. The

harmonious relationship between the board members and the Principal as well as their view sharing reflected the tradition of loyalty in the boardroom discussions. The process of strategy formulation was clearly led by the management executives (i.e. the SMT) with less involvement of non-executive members (i.e. the board members). Nonetheless, the Board was apparently happy that this relatively "hands off" approach of governance would make the decision-making process efficient and cost-effective.

5.2.7.2   Board Relationship after 2008 – Tension

In September 2008, a by-election was held and three new members were recruited to the Board. With new members, the Board started bringing new ideas and structures to the school management. While School Robin had an established mission statement supported by a core set of strategic goals, the Board subsequently called for a review of strategic planning in terms of vision, mission, values and strategic objectives. Their concerns were the lack of board involvement in the school's strategic direction. In subsequent meetings it was decided that strategic planning to change the school's vision, mission statement, values and strategic objectives would be undertaken at the beginning of 2009. The Board aimed at incorporating community participation and engagement in education initiatives and learning outcome.

During the process of developing the school's mission statement, the incumbent Board Chair was voted out of office and was replaced by one of the new board members. The new Board Chair was a powerful figure in the local community. He desired to bring in new features to the school and started focusing on raising the school profile by inviting community involvement in strategic planning and management initiatives. Consultation with a wide range of groups in the community was launched. A number of consultation workshops with various stakeholder groups were carried out between June and July 2009. The stakeholders included staff, students, parents, past students, local community groups, government agencies and business leaders. They were invited to participate in school events and functions. Feedback from parents and community members was positive and encouraging.

Parents and local communities became associated with both the school governance and management. Conclusively, the consultation exercise was a success and the Board decided to move on to stage two that would require the staff's continual effort to engage parents and community in improving student achievement.

One point worth mentioning is that the Board decided the strategic planning exercise and initiated the consultation process by contracting the project to a company that was introduced by one of the board members who was acquainted with the contracted company. This approach would allow the Board's governance function to be blurred by having the board members involved in the day-to-day management of the school.[24]

The Board also attempted to strengthen the board governance by establishing more committees. They were:

- Governance and Strategic
- Finances and Resources
- Property and Environment
- Communications and Relationships
- Pastoral
- Leadership Density

Board meetings expounded a strong concept of governance, designed to articulate to all members and hold the Principal accountable for his actions and decisions. Regular reports on various areas including academic achievement by ethnic groups, staff turnover, attendance and truancy, professional development and student support were expected of the Principal. There had been a shift of board discussions from operational management to strategic focus on all areas within the school.

Strategic initiatives or proposals by management to the Board were presented by a written report; informal verbal reporting was no longer acknowledged. The

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[24] See STANEWS, May 2009 - "A beginner's guide to board of trustees meetings avoiding traps for new (and not so new) players" published by the New Zealand Schools Trustees Association (NZSTA, 2009, p. 8).

dominating role of the Principal had been replaced by the full board discussions led by the Board Chair. The intense proactive role of the Board was manifested in proposals of meeting staff and visiting classrooms regularly, conducting regular parent meetings, and inviting prestigious business leaders to attend board meetings. Furthermore, it was observed that staff members were given opportunities to voice their concerns or even lodge a complaint to the Board Chair when an issue with the Principal arose; and parents' views could be heard and acted on. School newsletters were also placed in the stands inside local supermarkets where parents and community members could pick up a copy at their convenience. Clearly, the Board had a strong commitment to increasing stakeholder engagement in the school's strategic direction and driving School Robin to a new milestone.

The power of the Principal was diminishing with the increasing involvement of the Board in management issues relating to both operation and personnel. Under the growing demand for accountability reporting, the Principal had to re-allocate his time more for strategic planning than management issues. This had a flow-on effect to his senior management members who were required to provide detailed information to the Principal for reports and proposals to the Board.

Staff engagement in the school's strategic direction was intense and pervasive. Professional development and training was vigorously undertaken by senior management to improve their leadership skills; middle management was encouraged to up-skill their management qualifications; and board members were involved extensively in board of trustees training to gain knowledge about their governance role. An unexpected side-effect of staff engagement in the school's strategic direction, however, arose. The staff members, particularly the senior management, were struggling in balancing the level of attention to the strategic initiatives while dealing with day-to-day management deliberations.

With regard to the Principal's concerns, he was exhaustive in report writing, liaising with board members, parents and local communities, and dealing with student disciplines, management and staff issues. It was apparent that the Principal had been "hijacked" by the Board who decided on management issues, limiting the Principal's

participation. The Board's increasing involvement in both governance and management had threatened the Principal's leading role at the school.

5.2.8 Disparities between the Principal and the Board

Since new board members were recruited through by-election in September 2008, disparities in ideology as to how the school should be positioned had existed between the Principal and the Board. The Principal's leadership power was challenged by the Board, which was proactive to implement organisational change.

The Board Chair and the other board members (except the Principal) came to play in influencing the behaviour of the school members. They made staff accept that change was essential to raise the school's profile in the community. The launch of community engagement workshops had the effects of both mitigating the expected resistance from the staff members and gaining support from the parents and wider community groups. On the other hand, the Principal perceived the success of this community engagement exercise as intrusive, and that it would jeopardise his controlling power at the school. The Principal was struggling to accommodate himself with the Board's philosophical discussions at the board meetings. His negative sentiments were manifested in proposing a deficit budget to the Board, which was contradictory to his conservative approach to budget setting over the past years.

The Board collectively held the view that School Robin needed a radical change in its physical environment. An overhaul of its infrastructure was necessary to attract parents to send their children to School Robin. The Board began lobbying the Ministry of Education and soliciting support from the business leaders. It was clear that the Board's decision on the school's strategic direction was fundamentally different from the Principal's conventional style of leadership. The Board appeared to take the lead in radical changes to the school; whilst the Principal exhibited resentment at losing support from the Board and diminishing power over the school's directions. At the board meetings, the Principal reduced the amount of participation in the discussion about the school's strategic directions. In some

occasions, the Principal did not join the board members in visiting the classes. The division between the Board and the Principal put the school in a position where staff members were puzzled over which decisions to follow that best worked for the school.

The division between the Board and the Principal became wider and deeper. Their work relationship was irreparable and it eventually broke down. To allow the school to move forward, the Principal submitted his resignation to the Board and finished his tenure in School Robin at the end of 2009. Soon after, the Board recruited a new principal in 2010 to continue the Board's strategic mission in School Robin.

5.3   School Tui

When School Tui was invited for this study, the Principal expressed his interest enthusiastically. In-depth interviews were conducted with the Principal, the Finance Manager and the Board Chair, who was also the Finance Committee Chair. During the interview, they spoke of taking pride in what they had accomplished, the vision that the staff shared, and the culture that nourished the students.

The Principal had led the school for nearly ten years, while the Board Chair had served on the Board for over five years. The Finance Manager had been working at the school for more than six years, but he had only taken up this role for two years. A follow-up interview with the Finance Manager was later required. The interviews were undertaken between May 2008 and January 2009.

The researcher obtained the school's permission to attend the Finance Committee meeting held in June 2008. The researcher acted as an observer only at the meeting. Field notes were jotted down. During the meeting, the researcher was also provided with agenda papers plus associated reports. The meeting lasted for approximately an hour and a half. No discomforts on informed committee members' behaviour in the boardroom were observed. The response of the members was conclusively positive and constructive. The researcher also received the minutes of the meeting on the same day.

School documents over the past years were also accessed for data triangulation. Gratefully, the researcher was allowed to make copies for this research purpose only.

5.3.1 School Profile

School Tui is a large, decile 10, co-educational secondary school situated in the Auckland region. It accommodates more than 2,000 students from Year 9 to Year 13 and about 200 international fee-paying students. The school and its parent community are proud of the high level of academic and co-curricular achievement attained by students every year. The ethnic composition was diverse, in excess of 50 nationalities: New Zealand European 29%, Chinese 27%, other European 15%, Korean 9%, Indian 6% and other 14%. The Board of Trustees had 12 members comprising nine parent representatives, a staff representative, a student representative and the Principal. The Board was responsible for preparing the school charter and its strategic planning in consultation with the local communities. School Tui benefited from healthy demographic growth and the increasing enrolment of international students over the past years. In 2008, School Tui generated more than $4 million in locally raised funds which were mainly sourced from parent donations ($890,000) and international student tuition fees ($3 million). In fact, the amount of locally raised funds far exceeded the operations grant which was $2.7 million in 2008. The income derived from international students had become a highly profitable business for School Tui over the past ten years. Marketing and promotion activities as well as overseas recruitment trips were budgeted in anticipation of attracting more foreign students. A budget for an incentive remuneration programme was set aside to reward staff members for their hard work above and beyond their designated responsibilities.

Parents demonstrated their strong support and commitment to their children's education through the payment of donations and organising fundraising activities by the school Parents Trustees Association (PTA). In average each year more than eighty percent of parents paid the school donations. The profits derived from the international students enabled School Tui to employ additional teachers to improve student achievement, recruit more support staff to streamline administrative

workflow, and increase ICT spending to provide modern and well equipped classrooms.

5.3.2 Organisational and Management Structure

Like School Robin, School Tui was governed by the Board of Trustees. There were a number of committees which had delegated authority from the Board to carry out the designated responsibilities. They were:

- the Finance Committee, responsible for managing the school's finance and reviewing financial policy and procedures;
- the Property Committee, responsible for maintaining the school grounds, buildings, plant and machinery;
- the Discipline Committee, dealing with disciplinary matters in relation to students and staff; and
- the Personnel Committee, dealing with personnel matters such as employment and appointment, and reviewing personnel policies and job descriptions.

The Principal, acting as the Chief Executive, led the school with the support of a senior management team. The senior management team was hierarchically structured in a way that the delegated responsibilities of each member were defined and articulated. Comparatively, School Tui had a more layered senior management team which comprised the Principal, an Associate Principal, two Deputy Principals, four Assistant Principals and the Finance Manager. The school's strategic objectives and annual targets were stipulated in the Annual Plan and the Financial Plan projecting over the following three years. The senior management met two or three times a week to discuss all facets of the school management.

The Heads of Faculty/Department performed as the middle managers who were working with the senior management and the classroom-based teachers. The SMT had regular meetings with the Heads of Faculty/Department to seek their inputs for strategic planning and curriculum delivery. The middle managers played an

important role in coordinating information flow from both directions of top-down and bottom-up. The hierarchical structure of School Tui is depicted in Figure 5.

School Tui developed a Quality System to regulate the various functions in the school including the financial management. The Quality System was formulated in the school policy and procedures which provided guidance for staff members to follow. The school policies and procedures were compliant documents and each staff member was committed to the requirements contained in these policies and procedures. They could be consulted through the school's intranet which was accessible to all staff. At the Finance Committee meeting, the researcher observed that each member had a fair share of time for discussion, and nobody seemed to dominate the meeting.

5.3.3   Financial Resources

Unlike School Robin, School Tui received a high level of locally raised funds. More than eighty percent of parents paid the school donations. Furthermore, the number of international students increased sharply from 2005 to 2008. These two sources of locally raised funds contributed to more than 50 percent of the total operating income excluding the teacher salaries grant. These funds had created a strong buffer against the insufficient operations grant. This amount of discretionary funding provided extended flexibility for School Tui to achieve its strategic objectives. Accordingly, the number of international students enrolled and the percentage of parent donations had become a *must* discussion item at the Finance Committee.

The substantial operating surplus accumulated from the previous years enabled School Tui to acquire modern tools and equipment and develop infrastructure that was conducive to learning. It also allowed School Tui to recruit additional teachers to deliver quality education, making the school renowned for high student achievement. Table 13 provides the breakdowns of income and expenditure from 2006 to 2008.

Board of Trustees **Senior Management** **Middle Management**
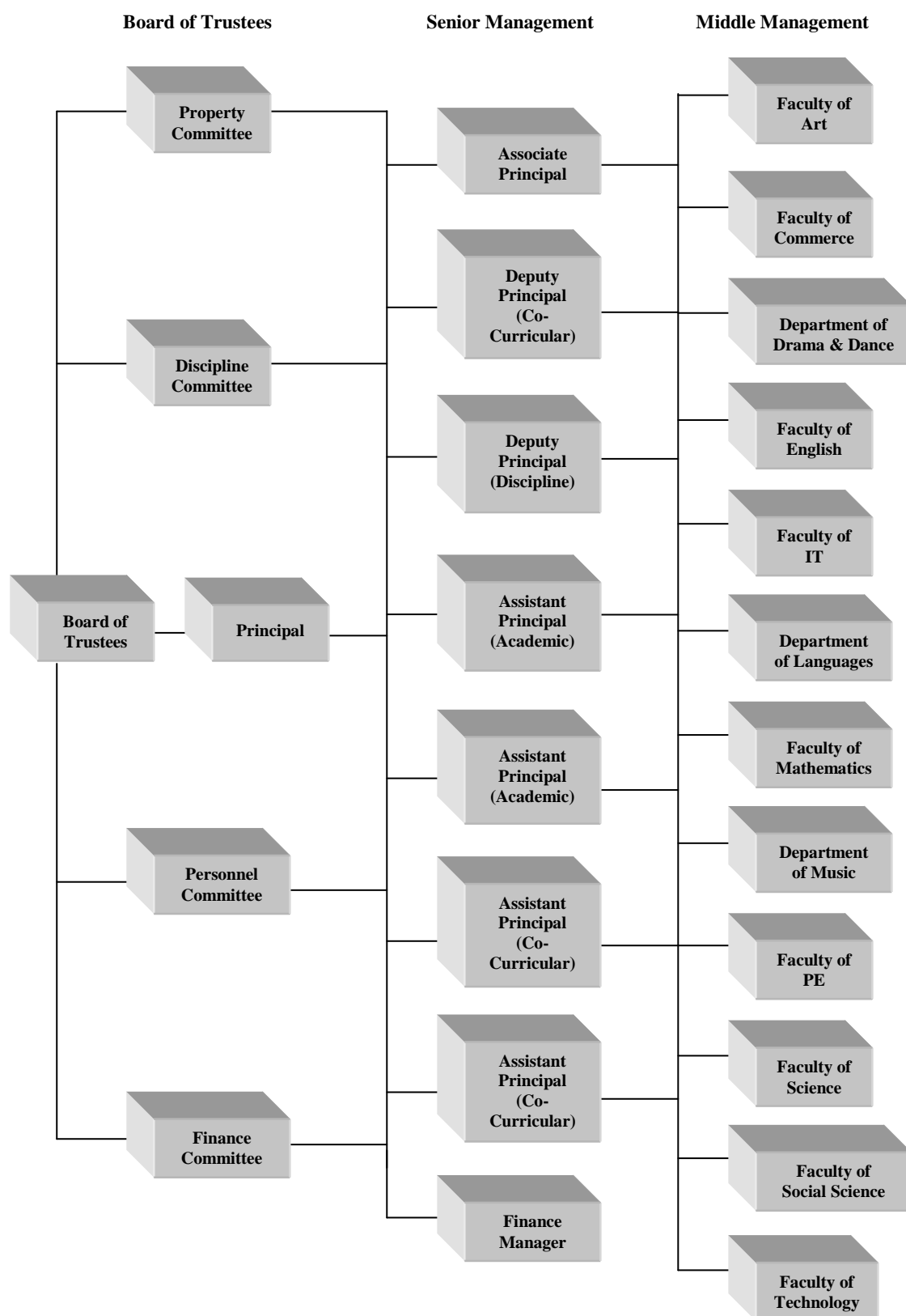
Figure 5. School Tui organisational chart 2008

Note: Some details and titles have been amended or omitted to protect organisational confidentiality.

Table 13. School Tui's breakdowns of income and expenditure (2006–2008)

School Tui	2006	2007 [1]	2008 [1]
Decile	10	10	10
Roll	2,309	2,271	2,263
International Students	157	205	227
Income			
Operations Grant	2,389,842	2,611,998	2,659,996
Teacher Salaries Grant	8,812,914	9,025,427	9,436,631
Other Government Grants	358,292	253,694	216,000
Local Funds	3,354,664	3,378,410	4,103,214
Interest	182,536	281,185	430,831
Use of Land and Buildings Grant	-	3,382,085	3,375,511
Gain on Disposal	8,538	-	-
Expenditure			
Learning Resources [2]	10,811,448	11,160,479	11,817,264
Administration	1,148,217	1,156,750	1,116,864
Property [3]	1,584,975	4,597,459	4,203,690
Local Funds	928,517	623,591	1,079,096
Depreciation	565,439	554,334	534,478
Finance Costs	-	6,753	-
Loss on Disposal	51,922	106,025	184,480
Net Surplus for the year	16,270	727,408	1,286,311

[1] Annual financial statements comply with NZ IFRS.

[2] Learning Resources includes teacher salaries.

[3] Property includes the notional lease cost of land and buildings owned by the Ministry of Education under NZ IFRS.

5.3.4 Budget Setting Process

The budget setting process started in June with the senior management's strategic planning meeting which formed the foundation for preparing the budget statement of intent. The school procedures stated that an annual budget strategy statement was prepared as a basis for annual budget preparation. Initially, the Finance Manager was responsible for preparing this budget strategy statement in consultation with the

Principal and then disseminated the statement to the senior management for discussion on financial aims and actions. The involvement of senior management in budget preparation was pervasive and encouraging. A meeting with budget holders at which the budget strategy was discussed and distributed was initiated by the Principal; and it formed a basis for individual budget holders to plan and prepare the budget for their responsible area.

Each budget holder was provided with budget planning sheets in September and was expected to complete and return them to the Finance Manager who compiled the Operational and Capital budgets. Other concerned parties such as the property staff and those working in the staffroom were also involved in the process of budget consultation. Participative budgeting was considered extensive – every staff member could have a say in the process. After a series of consultative exercises, the final budget was presented to the Finance Committee for approval between November and December.

Basically, the historical data formed a basis for composing the annual budget. School Tui began with the revenue first: operations grant, parent donations and tuition fees from international students. School Tui took a very conservative approach in their roll estimates, especially the number of international students. Only those international students who confirmed their return were accounted for in the budget. The budget for expenditure was needs-based, aligned with the strategic plan, and consistent with the annual targets. The financial goal was always a balanced budget. School Tui set a financial strategy that if the actual roll exceeded the estimated roll, half of this additional discretionary income would be put into school reserves. The remaining half would go to the waiting list of those capital items that had been requested but were not approved in the original budget. This strategy was considered operationally strategic and financial viable.

5.3.5 Budgetary Control

School Tui contracted an external consultant to assist in budgetary control. The consultant was also a member of the Finance Committee, and she provided the

school with up-to-date legislative compliance and requirements from the Ministry of Education. School Tui adopted a very firm budget management and kept a close eye on any changes in the number of international students enrolled, the percentage of parent donations received and spending in various budget areas. Budget holders with unfavourable[25] budget variances were warned by the Finance Manager and the warning was always copied to the Principal.

Each month the consultant highlighted those areas with budget deviations. The Finance Manager investigated and took remedial actions through offsetting the increase in spending by reduction in other budget areas while the global intent of the original approved budget was retained. This tactic required a high level of collaboration, negotiation and compromise among the budget holders. Tension and resistance was, however, seldom reported. This demonstrated that staff worked hard in a collegial manner and they committed themselves to achieving the global budget target. The work relationship between the senior management and the middle managers seemed to be goal oriented. They were enthusiastic and dedicated to meeting high expectations.

Generally, the Principal worked closely with the Finance Manager to retrieve and analyse information required for decision making. Updates on parent donations and the financial performance on international students were always included in the monthly reports presented to the Finance Committee. It was understood that these sources of revenue were crucial to the school as they represented nearly half of the operating income, excluding the teacher salaries grant.

As a result of a conservative budgetary approach and a higher than expected number of international students, the financial performances of School Tui over the past three years had significantly improved. Table 14 provides a snapshot of the financial performances of School Tui between the years of 2006 and 2008. School Tui's substantial school reserves had created itself a comparative advantage over other low decile schools which were operating under a very tight budget.

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[25] Unfavourable budget variance identifies the budget area which was spent over budget limit.

Table 14. School Tui's summarised financial performances (2006–2008)

Year	Reported Surplus / (Deficit)			Reported Cash and Investments		
	Actual	Budgeted	Variance	Actual	Budgeted	Variance
2006	16,270	13,267	3,003	2,303,751	1,529,351	774,400
2007	727,408	(436,552)	1,163,960	3,601,496	2,424,413	1,177,083
2008	1,286,311	107,174	1,179,137	4,742,103	3,485,257	1,256,846

Year	Reported Working Capital			Reported Non-Current Assets		
	Actual	Budgeted	Variance	Actual	Budgeted	Variance
2006	101,875	(118,943)	220,818	3,536,937	3,723,182	(186,245)
2007	956,161	221,908	734,253	3,758,854	3,091,504	667,350
2008	2,125,266	806,807	1,318,459	3,670,069	3,758,854	(88,785)

5.3.6   Management Style

The management style of School Tui was described as decentralised in operating level where the senior management allowed the budget holders to take part in decision making and encouraged them to take ownership of their responsibilities. The school policies required the Heads of Faculty to regulate the budgets within the faculty and also to draw the Finance Manager's attention to a growing problem as soon as it became apparent.

> *We try and generously fund those classroom based areas here so there's no shortage of resource…. Faculty heads have very much autonomy over what they want and what they spend in their budgets. It gives people ownership of their area.* (Principal of School Tui)

With regard to strategic decisions, they were centralised at the Board and the Principal level, though inputs from the management team were encouraged. During the process of budgeting, the budget holders understood that their wish lists could not be fully satisfied given the fact that the budget priorities were set in line with the annual targets. To maintain at least the previous year's level of budget, they

negotiated with the Finance Manager for budget bids. Any items outside the budget limits were expected to be reviewed later in the year when circumstances improved such as the number of international students enrolled exceeded the budgeted number. Half of the windfall gains from local funds would be put aside for the school reserves while the remaining half would be put back into those items which were turned down initially. These items were generally over and above the basic curriculum requirements – items that would be "nice to have", such as new musical equipment and overseas school trips. This tactic made a second round of capital budgeting possible in the circumstance that the actual locally raised funds exceeded the budget. It could, in turn, ease any tensions raised during the budget setting process.

Most interestingly, like School Robin, School Tui also had a Principal Discretionary budget set aside for meeting contingencies, such as financial assistance to students or supporting a learning initiative that was outside the budget. Despite the small amount, it provided a last resort to the applicant after all other alternatives had been exhausted.

The school policies and procedures were transparent and pervasive in determining decision outcomes. Staff acknowledgement in following policies and procedures was evident during the budgetary process where negotiations and compromises were collaboratively developed. Members of the school were observed to be open in discussion of issues and exhibited a strong sense of commitment to the school. Internally, School Tui had cultivated a trusting, respectful and dedicated work relationship among the management team, which was beneficial to achieving annual targets.

To communicate with external stakeholders, School Tui implemented the following practices to encourage engagement with parents and communities:

- The school website was updated daily with language translations and timely information on school activities and operations.

- School newsletters were published on the school website and through email communication to parents and community members.

- Parents were engaged through surveys that contributed to determining the future directions of the school.

- Parents and communities were involved in school activities and functions, such as open days, sports and cultural events.

- The Parent Teacher Association was engaged in fundraising activities and school functions.

- The frequent exposures of the Principal in the community events and school activities established networks with stakeholders and encouraged their engagement in school matters.

Externally, School Tui gained support from the parents and the wider community who highly recognised the school's success in management leadership and student achievements. School–community partnerships and relations were strong through the active role played by the Principal and the community involvement in school functions and cultural activities. Internally, work relationships between the Board, the Principal, senior and middle management and staff were constructive, participative and collaborative. The inputs from staff of all levels received equal emphasis and attention by the Board. The Board had a very clear and firm focus on managing financial resources to support the school's strategic goals for delivering quality education to the community. All in all, School Tui adopted an open and engaged management approach in meeting internal and external stakeholders' needs.

5.4   School Kea

When School Kea was invited to participate in this study, both the Principal and the Board Chair gave their consent sincerely and zealously. Individual interviews with the Board Chair, the Principal, and the Finance Manager were carried out between January and April 2009. A second interview with the Board Chair was necessary to obtain further details on the issues identified. Initially the interviews started with a rapport in order to develop a trusting relationship between the respondent and the researcher. Throughout the interviews, the researcher was acting as an intensive

listener and asked questions when an issue was probed. The respondents were observed to divulge information freely and comfortably.

In addition, school records over the past three years were examined. Some of the documents such as annual reports, monthly management reports, annual budgets and an organisational chart were made available for the research purpose only. Minutes of the meetings and Principal's reports were studied on site and field notes were jotted down.

5.4.1   School Profile

School Kea is a medium, decile 3, single-sex secondary school in Auckland. It has a roll of 900 students from Year 9 to Year 13, and a few international fee-paying students. School Kea serves a diverse multicultural community. The ethnic composition was multi-cultural with Māori 17%, New Zealand European 11%, Samoan 29%, Tongan 7%, Asian 5%, Fijian 5%, Indian 5%, Chinese 3%, other ethnicities 18%.

School Kea was established in 1954 and had a strong tradition of excellence in academic, cultural and sporting endeavours which students and staff were proud of. Cultural groups and sports teams at the school were actively participating in external cultural festivals and tournaments respectively. Also, the school had been dedicated to success in student learning over the past years. School Kea also led a role within the neighbouring schools in an initiative to raise the student achievement in literacy and numeracy.

The Principal had led the school for over 12 years. He was a sector leader working with a group of schools which had Māori and Pacific Island students making up the biggest groups in these schools. These school leaders were continually promoting educational initiatives that would contribute to success in the community.

5.4.2 Organisational and Management Structure

School Kea was governed by the Board of Trustees which had nine members – six parent representatives, a staff representative, a student representative and the Principal. Like School Robin, there were three committees to carry out part of the Board's roles: the Finance Committee, the Property Committee, and the Discipline Committee. School Kea had a senior management team which comprised the Principal, the Deputy Principal, three Assistant Principals and the Finance Manager. Each of them had delegated responsibilities to manage the school matters. The Finance Manager managed the school's finance. The Deputy Principal was responsible for curriculum and assessment, while the three Assistant Principals managed student pastoral care, timetabling and student health and sports respectively. Each of the senior management members was also responsible for at least one faculty. For example, the Principal was responsible for the English Faculty which was the biggest faculty in the school. Altogether there were eight faculties and the Heads of Faculty had a responsibility to oversee budgetary expenditure, professional development, appraisal, classroom monitoring, curriculum and assessment reporting. Each Head of Faculty had an Assistant Head of Faculty to assist him/her in managing classroom teachers. The core business of the faculty was teaching and learning, and the Heads of Faculty, as middle managers, carried out these responsibilities and also supported the senior management in such areas as the strategic goals and the annual plan of the school. Figure 6 outlines the organisational structure of School Kea.

Like School Robin, School Kea had developed a business partnership with one local prestigious firm to help the school strengthen its leadership and governance by sharing knowledge and skills rather than providing financial assistance. This partnership assisted School Kea in strategic planning and developing resources to increase the level of student achievement, thereby benefiting the students and local community.

Board of Trustees **Senior Management** **Middle Management**
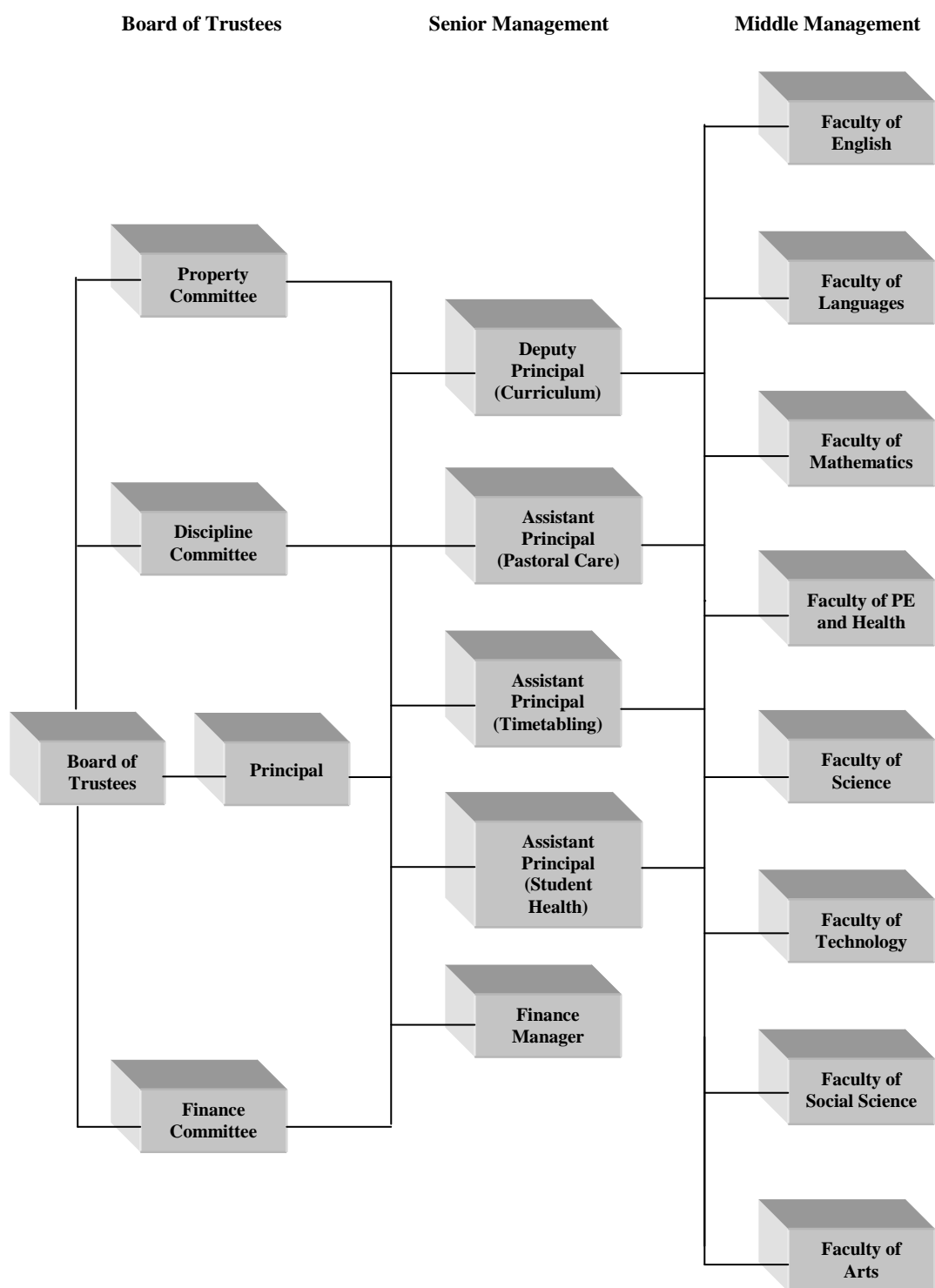
Figure 6. School Kea organisational chart 2008

Note: Some details and titles have been amended or omitted to protect organisational confidentiality.

The Principal advocated communications with stakeholders through various learning programmes, school events and functions. Parents and communities were invited to attend fono [26] and hui [27] on strategic planning, school functions for celebrating achievement, and networking initiatives.

5.4.3 Financial Resources

Operating under similar circumstances as School Robin, School Kea depended primarily for their cash needs on the operations grant and the teacher salaries grant. The declining roll in both domestic and international students had a financial impact on the school over the past three years. The income derived from locally raised funds contributed to between 20 and 30 percent of the total operating income, excluding teacher salaries. This amount was $500,000 in average and it was generated from parent donations, fee-paying international students, trading activities and fundraising.

School Kea had to live on the low percentage of locally raised funds. Fortunately, the healthy cash position [28] enabled the school to drive through the tough times between 2006 and 2008. A prudent cash management was always employed to meet payables and commitments.

Despite the financial constraints, financial resources were allocated in a way that was in line with the strategic plan and annual targets. Most of the financial resources were given up to the learning needs and demands. Other luxuries, such as overseas trips had to be compromised because of insufficient funds. Table 15 presents the breakdowns of income and expenditure from 2006 to 2008.

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[26] "Fono" is a Samoan language which means "meeting".
[27] "Hui" is a Māori language which means "meeting".
[28] Refer to Table 16. School Kea's summarised financial performance (2006-2008)

Table 15. School Kea's breakdowns of income and expenditure (2006–2008)

School Kea	2006	2007 [1]	2008 [1]
Decile	4	4	3
Roll	967	927	905
International Students	8	5	5
Income			
Operations Grant	1,273,070	1,337,051	1,399,845
Teacher Salaries Grant	4,168,968	4,374,255	4,395,564
Other Government Grants	200,234	155,644	348,703
Local Funds	473,465	519,919	548,022
Interest	104,649	124,970	155,118
Use of Land and Buildings Grant	-	865,267	998,505
Gain on Disposal	-	124,970	20
Expenditure			
Learning Resources [2]	4,693,030	5,012,086	5,296,005
Administration	504,418	552,799	548,583
Property [3]	673,550	1,384,479	1,618,341
Local Funds	218,742	279100	192,468
Depreciation	128,733	114,293	114,008
Finance Costs	-	-	-
Loss on Disposal	6,274	6,017	7,086
Net Surplus/(Deficit) for the year	(4,360)	28,331	69,286

[1] Annual financial statements comply with NZ IFRS.

[2] Learning Resources includes teacher salaries.

[3] Property includes the notional lease cost of land and buildings owned by the Ministry of Education under NZ IFRS.

5.4.4 Budget Setting Process

The budget setting process began in July when a planning meeting was held. The senior management, the Heads of Faculty and the Finance Manager attended the meeting at which the Principal explained the strategic direction, annual plan and the process for the following year's budget. Budget setting guidelines and work sheets were distributed to the budget holders at the meeting. Included in the work sheets

were a Faculty Evaluation Form which served as a review of the faculty performance and its resources, a Description of Goals for the following year, and a Capital Request Form. The budget requests were expected to be in line with the annual plan and targets.

The budget holders were required to review their current actual income and expenditure and make a forecast to the end of the year. Based on this information, the budget holders worked out the budget requests for the following year and submitted their requests to the Finance Manager. The Finance Manager collated the budget applications from all budget holders and prepared the first draft budget by the end of October. During the period between September and October, the Principal held a number of meetings with his management team to disseminate the annual plan and financial plan in order to buy-in the support of the budget holders.

The Board and the Principal were working closely together to budget for either a balanced budget or an acceptable operating deficit. With this precept in mind, the Principal initiated a series of discussions, negotiations and compromises with the budget holders concerned. Challenges on budget decisions were inevitably encountered. These challenges were generally settled after explanations from the Board and/or the Principal were provided.

Eventually, the final budget was presented to the Finance Committee in November and was ratified by the Board in December.

5.4.5   Budgetary Control

Like School Tui, School Kea also contracted with an external consulting agency to assist the school in budgetary control. Most interestingly, the consulting agency School Kea employed was the same as the one School Tui contracted with. Not surprisingly, the monthly financial report of School Kea presented by the consulting agency was heavily focused on budget variances. Areas of unfavourable budget variances were identified and the school management would take actions to adjust

the budget areas to reflect the need for increase. In most of the circumstances, budget cuts in other areas were necessary to cover the increase.

Over the past years, School Kea was experiencing a roll decline. Accordingly, the budget was constructed in a prudent manner. It was widely accepted by the school that all spending would stop at the end of October. This practice would allow the school management to review the overall spending performance before it was too late to take preventive actions against overspending.

Budgeting for 2009 was a challenge to School Kea. The budget had been trimmed from a deficit budget of more than $400,000 to less than $40,000. Tremendous efforts had been made by the Board and the Principal to identify those areas where budgets could be trimmed without compromising annual targets. Budget areas that were "nice to have" were cut initially. They included overseas trips and the purchase of musical equipment. Attempts were also made to encourage parents to offer donations to the school through ongoing appeals in the newsletters.

Throughout the year, the Principal worked closely with the Finance Manager in monitoring the budget on a regular basis. The consulting agency also worked in parallel with the Finance Manager and was responsible for presenting to the Finance Committee a monthly financial report which highlighted those areas of unfavourable variances. Included in the financial report was a projected working capital at the end of the financial year. The projected working capital indicated the level of liquidity that concerned the school the most. Monthly faculty performance reports were distributed to each Head of Faculty who was expected to evaluate the faculty's budget performance and rectify any overspending.

Parent donation was a concerning area to School Kea although it was only two percent of the operations grant. Additional subject fees and sport fees were imposed and parents were reminded through newsletters to make payments that were outstanding. This was a common phenomenon in schools, whether low or high decile, that parent donations were perceived as discretionary funds that schools could decide how to spend. Apart from urging parents to pay fees and make

donations, the board discussion also related to seeking funds from sponsors or charitable organisations which could assist financially in school resources.

Conclusively, School Kea exercised budgetary control tightly by the Board and the Finance Committee through the Principal. Table 16 summarises School Kea's financial performances between 2006 and 2008.

Table 16. School Kea's summarised financial performances (2006–2008)

Year	Reported Surplus / (Deficit)			Reported Cash and Investments		
	Actual	**Budgeted**	**Variance**	**Actual**	**Budgeted**	**Variance**
2006	(4,361)	(11,480)	7,119	1,532,304	1,622,468	(90,164)
2007	28,331	6,304	22,027	1,676,164	1,553,988	122,176
2008	69,286	20,171	49,115	2,215,138	1,765,136	450,002

Year	Reported Working Capital			Reported Non-Current Assets		
	Actual	**Budgeted**	**Variance**	**Actual**	**Budgeted**	**Variance**
2006	1,056,481	1,022,434	34,047	1,677,679	1,551,524	126,155
2007	1,083,414	1,092,138	(8,724)	1,661,679	1,575,656	86,023
2008	1,352,446	1,165,356	187,090	1,624,866	1,599,908	24,958

5.4.6 Management Style

The Principal advocated distributive leadership in which leadership was shared among individuals. This means the Principal, Deputy Principal, Assistant Principals, Heads of Faculty and classroom teachers were distributed leadership power in school management aspects. This would allow the Principal to focus more on the strategic direction of the school. The Principal strongly emphasised the importance of delegation:

The challenge for them (senior management) is to learn to delegate. I am not expecting them to go and do all those things. They have to learn to delegate and to give support and guide and help the people they are working with. It's really distributive leadership. (Principal of School Kea)

The Principal, the Deputy Principal and the three Assistant Principals had clearly defined responsibilities. The Principal believed that under the distributive leadership, individuals were working collaboratively towards the school-wide values and culture set in the school charter. He suggested that linkage to distributive leadership was through courageous conversations and participatory management.

I see myself as an advocate and I am a very much a strategic thinker. I make sure that other people are informed and feel they have had a part in the discussion because you are going to bring those people along with you. (Principal of School Kea)

To encourage stakeholder engagement, the Principal attended the Student Council to get feedback from students, participated in fono and hui where parents made direct contact with the school, and organised meetings with local schools to consolidate efforts to meet the student needs and community's demands.

With regard to budgeting, school resources were allocated in a way that reflected the current needs and demands of the students, in line with the annual targets. The Principal was satisfied that financial resources were allocated fairly to make sure each budget holder had a reasonable amount of money in their budget for teaching and learning. The Principal was also involved in budgetary control.

I send out memos or emails to some budget holders where I am not happy with the expenditures that have gone over budget. Sometimes I have to get someone in to talk to them but mostly they got on to that. I want people to be careful about expenditure. I don't want any crazy expenditure and people on the whole follow that. (Principal of School Kea)

The Principal was proud of the school's success during his tenure at School Kea for more than 12 years. The student achievement had been raised, the school profile in cultural and sports activities was acknowledged, support from the community was gained, and his leading role in the school sector was recognised. He described his work relationship with the Board as supportive and encouraging. He believed that

School Kea was making changes that would lead to success through various forms of consultation, participation and engagement.

5.5   Conclusion

A brief background description of each of the three schools under study has been presented. The similarities and differences among the three schools are summarised in Table 17.

Table 17. The similarities and differences of School Robin, School Tui and School Kea

Similarities	Robin / Tui / Kea		
Management Structure	Comprising senior management and middle management		
Budgetary Approach	Adopting a conservative approach		
Budgeting System	Practicing participative budgeting		
Budgetary Control	Exercising tight budgetary control		
Stakeholder Engagement	Encouraging stakeholder engagement		

Differences	Robin	Tui	Kea
Leadership Style	Autocratic	Oligarchic	Democratic
Power Influence	Held by Principal	Held by senior management	Held by senior and middle management
Authority Delegation	Ineffective delegation	Delegated to senior management	Delegated to senior and middle management

Furthermore, drawing on the literature review in Chapter Two, a number of themes emerge in the three cases studied. The first theme relates to the notion of budgeting as a political tool for control over budgetees. Budgeting acts as a source of power to satisfy the needs of the budgeters and the budgetees through a series of negotiation and bargaining processes. The second theme ties in with the first one that budgeting is a means of actor-network in its social context. Budgeting systems are objectified in forms of artefacts that align individual interests with the organisational goals. The management could portray control systems as a commitment to rational decision making. The third theme concerning stakeholder participation relates to both the first

and second themes in a way that actors in the social context are interacting, negotiating and influencing each other. From the social-political perspective, power and authority is conceptualised during the budgetary process. The allocation of resources between human purposes during the budgetary process is in itself complex and involves a multitude of rationalities. The input/output transformation is characterised by the rational behaviour of stakeholders who participate in the budgetary process.

The unique characteristics of each case and the themes emerging form the basis of the discussion in Chapter Six and Chapter Seven.

CHAPTER SIX
APPLICATION OF ACTOR-NETWORK ANALYSIS

6.1   Introduction

The primary objective of this study is to examine the operation of financial management at schools, particularly in the area of budgetary process. Drawing on ANT, this chapter provides a detailed account of the findings through the study of three schools focusing on the interconnections between participants in the budget setting process. Firstly, how a budget creates an actor-network is explored. Next, the inscription and black-boxing of the budget are described, followed by a discussion about the application of the translation process to the budgetary process. Lastly, the conceptualisation of an obligatory passage point is explored in different contexts as to how the focal actor is made indispensable to other actors. Then the determinants of an obligatory passage point are identified.

6.2   Budget as Actor

Traditionally, budgeting is seen as a decision-making tool to assist in resource allocation. From the perspective of ANT, budgeting becomes an actor creating an actor-network by which individual interests are aligned with the organisational objectives. The budget document is ultimately inscribed to engage the actors to take collective action and legitimise the focal actor's action on other actors. The budget itself becomes unproblematic and uncontroversial. At this point the actor-network is stable and irreversible.

6.2.1   From Resource Allocation to Creation of Actor-network

Historically, budgets for schools were centrally undertaken by the then Department of Education. In the late 1980s with the introduction of *Tomorrow's Schools*, budget setting has become an in-house exercise that each school must go through every year

in order to formulate an annual budget. The budget setting process constitutes the decision making for resource allocation that empowers the decision makers over the financial resources. Recently, a budget has played an important role in facilitating the political decisions of rationalities and economic efficiencies in its socially constructed context. The combination of the significance of the budget and the interest people show in it creates a consortium of actors who bring the budget to life. Representing their interests on the budget, the actors join together to form alliances and hence actor-networks. It is crucial to acknowledge that a budget is not "a self-containing piece of technology" (Hanseth & Monteiro, 1997, p. 194). A budget is a heterogeneous actor-network of aligned interests. The actors include the Ministry of Education which provides directions to the school sector; the Board of Trustees governs the school; the Principal manages the school and allocates resources; Associate/Deputy/Assistant Principals assist the Principal in school management; the Finance Manager prepares and manages the budget; Heads of Department/Faculty are responsible for curriculum delivery to meet student needs; accounting technologies are used for standardisation of budget development; and policies and procedures as well as budget variance reports define and guide budget management.

Figure 7 presents the model of the actor-network analysis which is in a sense based upon the interdependence of the accounting technologies and the dependence of human actors on the budget.
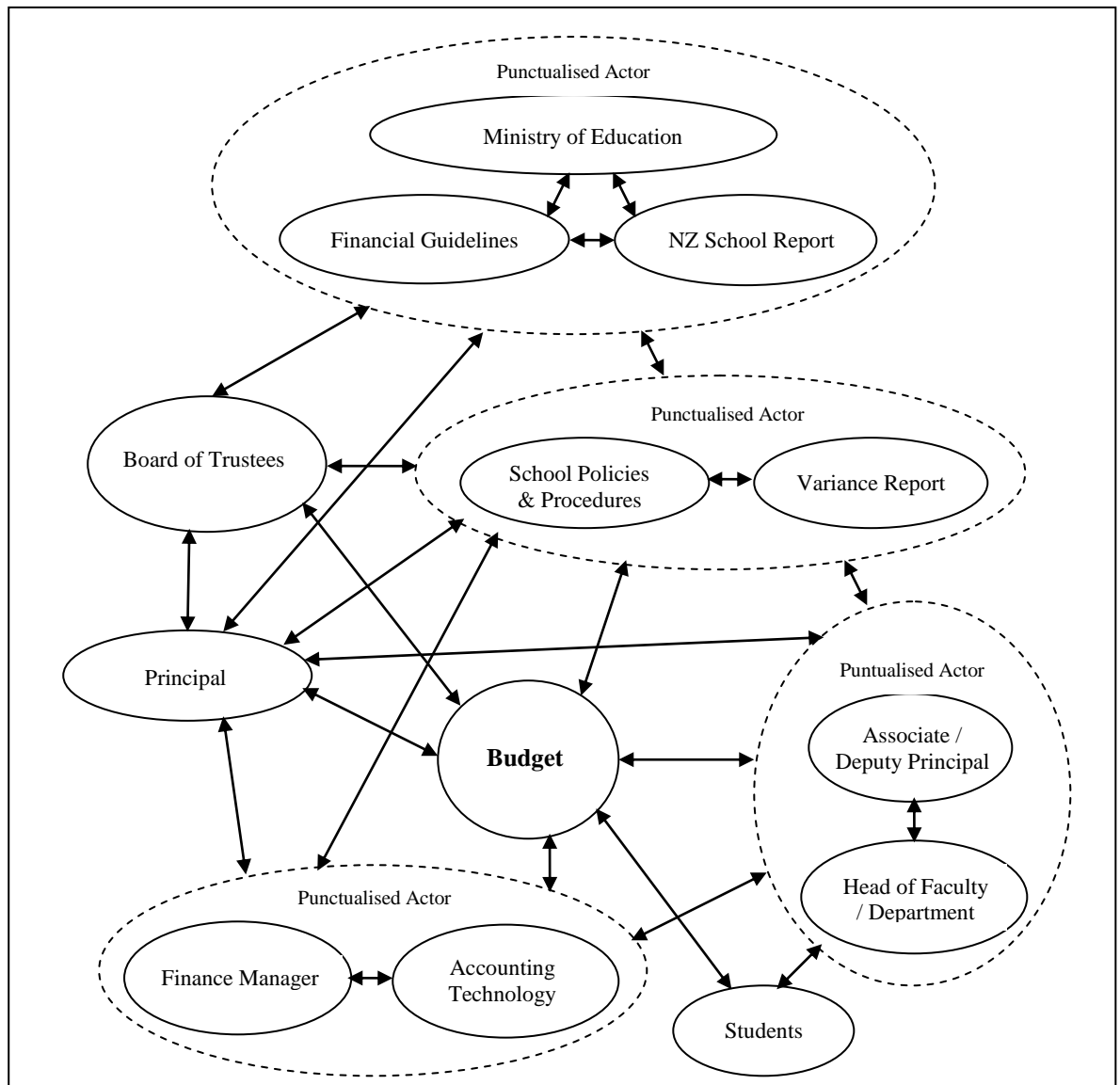
Figure 7. Framework of the actor-network analysis in the budgetary process

6.2.2 Tracing the Actor-networks

The development of the budget involved the participation of uncoordinated efforts of many actors. Individuals working in different learning areas at schools were considered isolated and independent of each other. With the advent of budgeting, the actors within the school collaborate and hence emerge as allies in the actor-network as they were working towards the budgetary targets.

The Principal and the Finance Manager initiated meetings with Associate/Deputy/Assistant Principals and the Heads of Department/Faculty to disseminate the targeted budget established by the Board. The Finance Manager, a spokesperson of the budgetary process, started negotiations and mediations with the participants of very different perspectives on what the budget might offer. The Heads of Faculty/Department requested a share of financial resources that could deliver a high quality curriculum, while the Principal and the Finance Manager were much more inclined to allocate resources to areas that would meet the annual targets. Much of the latter's concern was regarding expectation of budget holders who could manage spending within the budget throughout the year as the Principal was accountable to the Board for budget control. This disparity could be minimised by continually engaging collaboration and communication activities such as consultation and feedback.

> *Consultation is all about being committed to the school that you are working for. It makes people buy into it when they know that their views are being considered, and that they are considered a part of it…. If you have gone through a consultation process the decisions are much more easily accepted and there's less likelihood of cronyism and favouritism.* (Ex-Deputy Principal A)

It appeared that this "buy-in" process involved a good deal of time trying to ensure that sustainable relations were maintained with the participants. The Principal and the Finance Manager were engaged in different staff meetings to ensure budget holders took responsibility for budget management. The Finance Manager, who was the only person with knowledge of budgeting, worked much of the time in informing the budget holders of the budgetary decisions made by the Board.

> *Heads of Department would be advised on the board guidelines of the budget. For example, we will not be spending too much on computers next year. We will be spending less on sports. We will be spending more on new initiatives. So they know this is the focus of the school budget next year.* (Finance Manager of School Tui)

The Finance Manager engaged with the budget holders for the purpose of aligning their individual interests with the school's strategic objectives. The Principal, the

final decision maker of resource allocation, captured the Finance Manager's knowledge in budgeting and exercised control over the budgetees.

> *There is a management team that does all decision making, headed by the principal; and management team will of course seek out inputs from relevant second level tier, but ultimately the responsibility or decision making is always the Principal. The Principal will be the person making the final call based on whatever input he will get from his team…. I will keep an eye closer on the budgets knowing that they have a tendency of exceeding and they will always be warned and the warning will always be copied to the Principal.* (Finance Manager of School Tui).

The budget is not only a product of accounting technologies designed and controlled by the controllers, but also an actor shaping the participants' behaviour and the relationships between them. It was evident that the formation of alliances could assist the actors in acquiring new abilities to negotiate and adjust their representations. In School Robin, Heads of Department whose areas have shown low student achievement worked together as allies to gain stronger bargaining power over resource requests.

The Board, the Principal and the senior management team generally had a consensus about the importance of achieving the annual targets within the financial resources available. This drove the budget to be formulated in line with the annual targets.

> *(The budget) is of significance to the financial viability of the school and everyone is always worrying about the bottom line…. We've got a decent reserve and we just keep, we can, to fulfil our strategic objectives when we need funds.* (Principal of School Tui)
>
> *I focus very much on what as I said is our strategic plan, our annual targets and on our core business which is teaching and learning. And everything else is a luxuries extra and sometimes they just don't get the money.* (Principal of School Kea)

On the other hand, the middle managers had individual interests in their own right. In School Robin, the Head of Hospitality would like to see the training restaurant be equipped with modern facilities and furniture. In School Tui, the Head of ICT wanted every classroom provided with a data projector. In School Kea, the Head of Music desired quality musical instruments for the chamber orchestra. Aligning and

translating multiple interests into the school's strategic objectives, and a willingness to act in accordance with the annual plan required the enrolment of a sufficient body of allies. This was achieved by participative budgeting in which actors (budget holders) were involved in budget decisions in their responsible area. This form of participative budgeting could be visualised through the inscriptions of budget and by the same interpretation in the school policies and procedures.

6.2.3   From Inscriptions to Black-boxing

Inscription is a process of creating text and communication artefacts that enhance and perpetuate the interests of an actor. Also, inscription is the conduit used by actors to gain credibility and legitimation. A budget is an artefact that is inscribed by the accounting technologies. In other words, a budget is a product of technological work. The budget cannot exist itself in its socially constructed context. It requires actors to carry out work as intended. Practically speaking, the budget is a discourse to establish interactions with the human actors. Chua (1995, p. 117) argues that "it is people who make up accounting numbers in specific ways to try and achieve certain objectives." The accounting technologies, having the power of the numbers, produce facts to convince other actors and glue them to the network (Lowe, 2001a). The budget obtains its "relational materiality" (Law, 1999, p. 4) through its relations with the human actors. Grint and Woolgar (1995, p. 289) claim that technology "exists only in and through our descriptions and practices, and hence it is never available in a raw, untainted state." In the school context, the budget can be presented in various forms as either a document or a precept.

A budget could be depicted as a "black box". A black box is the evidence that the actor-network is stable and that the actors are working towards collective goals. Latour (1987, p. 131) defines a black box as "either a well-established fact or an unproblematic object." As soon as a budget has been constructed and approved by the Board of Trustees, it is a compliant document or precept that all budget holders have to follow. The budget, which assembled the disorderly elements, has a bearing on the interests of all participants in the budgetary process. The budget itself started with enrolment of allies; the spokespersons were able to present convincing facts

about the budgeting system. By allying themselves with the senior management, the middle managers could re-shape their positions in the negotiation mode and benefit from the collective work of all actors. In some circumstances, the human actors drew attention to aspects of non-human actors such as budget figures and textual documents. The budget variance reports and the communication of policies and procedures were examples of non-human representatives within the budgeting system. The interrelationship between the budgeting system and accounting technologies assisted in "the assembly of the disorderly and unreliable allies" to form "an organised whole" that "may be used to control the behaviour of the enrolled groups" (Latour, 1987, pp. 130–131). It would mean that the non-human actors would play the role of "checks and balances" in order to keep actors in place. In this sense, the budget developed by the use of accounting technologies is deemed acting as an intermediary to enrol actors forming networks among themselves. Intermediaries are the language of the network which connects actors in the network. Through intermediaries, actors communicate with one another and this shapes the way by which actors translate their intentions into other actors to achieve interest alignment. The possibility of commanding intermediaries lies at the heart of the action itself; that is, translating an actor's will into other actor's interests. The success of translation requires negotiation, collaboration and unselfishness among participants in the budgetary process.

The budget is a technological artefact and, in Latour's term, is an "actant" which interacts with human actors in the network. The budget builds alliances through the process of enrolling allies and controlling their behaviour (Latour, 1987). Practically, the budget provides the legitimacy to maintain the authority of the powerful actors. It was evident that the frequent use of internal communication bearing signatures of the Principal and the Finance Manager in School Robin assisted in enrolling other human actors and then mobilising them to the network. The alliance between the Board, the Principal and the Finance Manager was maintained and visualised in some forms to assemble the middle managers to achieve the strategic goals.

I have meetings with all the budget holders of the school. I remind them of the procedures they are going to have to follow and I have the strategic plan there with me to remind them of what the budget is focusing on for that particular year.... I remind them this is taxpayer money ... and that's what funds the schools. We have got to be accountable and show that we are using the money wisely and for the benefit of our students. (Principal of School Kea)

Annual plans must be supported by budget otherwise nothing would happen. So I would have to translate it into budgetary equivalent so that they [budget holders] can execute those plans, so that would be my key role. (Finance Manager of School Tui)

It could be said that the budget itself is embedded in a heterogeneous actor-network; it requires the actors in the network, which includes accounting technologies and the users, the Ministry of Education's guidelines, school policies and procedures and budgetary variance reports, to manoeuvre it. The budget, once created, would become a black box which was unproblematic and allowed to forge links between organisational objectives and diverse individual interests. The process of black-boxing emphasised examining actors to see how particular struggles or controversies among them become resolved. The black box would not be questioned for some time until it is challenged.

6.3   The Process of Translation

Conceptualising the budgetary process as a network of human and non-human actors has implications for addressing the issues of inclusion and exclusion of participants within an organisation. It should be noted that some forms of controversies existed before the budget was black-boxed. To understand the process of black-boxing, the form of "following the actors" (Lowe, 2001b, p. 340) would provide a repository of information in relation to what the actors did and how they interacted with the technology and its inscription from the resultant connection between human actors and non-human actants. The budget was seen as a stable black-boxed technological artefact. This artefact was transformed through a continual process of defining budgeting system to mobilise and engage the diverse heterogeneous actors for

creating an actor-network. Callon (1986) describes the formation of an actor-network as the process of *translation*.[29]

6.3.1 Problematisation

In the first stage of translation: problematisation, problems, solutions and key roles of actors are defined (Callon, 1986). Constructing an annual budget was identified as an uncontroversial process. In practice, a budget was crucial to guide the school in making effective and economic decisions in resource allocation and to assist in achieving strategic goals. At this point, the problematisation decided who would participate in the budget setting process. It also included redefinition of the interests of individual participants and a solution to the controversies. The Heads of Faculty/Department were involved in the process as they were close to the students and could respond quickly to their needs and demands. As budget holders, they were the key people to manage the budget within their responsible area. As the spokesperson, the Finance Manager provided training to them as to how a budget should be developed and managed. He also explained to the budget holders the importance of budgetary control which would keep the school financially sustainable. This "buy-in" process fostered a budget awareness culture within the school that all the budget holders were spending wisely and prudently.

The budgetary control system included the provision of financial information to the Heads of Department/Faculty. From the perspective of the Heads of Department/Faculty, a budget was a guaranteed sum of money that they were authorised to spend at their discretion during the year. From the management's point of view, a budget was an indication only of how much financial resource was allocated to each budgetary area. Whether the budget could be spent largely depended on the availability of cash at that point of time. The Board could exercise its discretion to restrict spending when it was necessary.

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[29] There are four stages of translation: problematisation, interessement, enrolment and mobilisation. For details of these stages, see Chapter Four.

A budget isn't a sum of money to be used up. It's an indication of what your priories are for the year…. And things can change; the roof can fall in and therefore you have to fix the roof, just like in your house…. I think it's really hard for educators to translate what happens in real life into their working life and certainly that was my biggest challenge as a Principal and so it's about education and training for your budget holders. (Principal of School Robin)

It's been a little bit hard in the last round of budgeting because of having to trim back so much as the numbers go down…. But in the end it still meant that discretionary expenditure like overseas trips and a lot of the sort of field trips, the more costly programs that the school was paying for were also trimmed back, so we took a little bit from everywhere and we ended up having to shave off something in the order of a three hundred and fifty odd thousand dollars from the budget. (Board Chair of School Kea)

Nevertheless, the budgetary process offered a concession to the theories of participation and motivation in budgeting at the middle management level. In Callon's (1986) term, the budgetary setting process may be described as an "obligatory passage point" for controlling and monitoring the financial resources.

The development of the budget involving staff participation and continuous "buy-in" exercises was maintained throughout the year. The responsibility of a budget holder was defined and the purpose of a budget was understood. Concerns about the immediate needs for resources were raised with the Finance Manager first; discussions were initiated and solutions were sought in a constructive and supportive approach. Wherever challenges appeared, the Principal was the final decision maker to settle the controversies. These work practices were done in a way that made interaction between participants indispensable.

6.3.2 Interessement

In the interessement stage, actors commit to the problematisation identified (Callon, 1986), and approach other actors to engage in the network (Mahring et al., 2004). In School Robin, the active actors were engaged in the network by clarifying their defined roles and undertaking negotiation dialogues with the Finance Manager. The passive actors, however, were "silent" and took a status quo approach in managing their budget. These passive actors seemed to accept and follow the ritualistic way of

hierarchical responsibilities assigned to them. The actors, either active or passive, accommodated themselves to the proposed identity of the focal actor and to entering the emerging actor-network.

The involvement of dialogues and negotiations among actors had successfully allowed flexibility in problem solving. The Finance Manager explained to the budget holders about the benefits of budgetary controls and presented the positive results of good budget management. Seeking an alliance with other actors, the budget holders redefined their roles which were consistent with the school's financial goals. They accepted that the budget was a compliant document while negotiation dialogues were continually maintained.

6.3.3   Enrolment

The third stage of translation, involves enrolment, concern, negotiation and agreement between actors. The Finance Manager, acting as the spokesperson, convinced and enlisted the budget holders who were the key actors contributing to the budget construction and management. The formation of an alliance was never assured. To align the diverse interests of different individuals with the school's pre-established objectives, individuals must be willing to be receptive and resilient to other ideas. In School Robin, the Finance Manager was prepared for existent resistance that was previously ignored and neglected. He engaged multi-lateral negotiations, trials of strength and tricks to secure success. He provided training to the budget holders in budget management and economic use of resources. In School Tui, the Finance Manager promised to review the budget if the actual income exceeded the budget. In School Kea, the budget holders were given more freedom to make decisions that were within budget. This device of interessement through negotiations, agreement and adjustment had made the resistance be attended to, opinions be listened to, and efforts be recognised. The actor-network grew with the alignment of many actors' interests.

6.3.4 Mobilisation

The final stage: mobilisation is the establishment of enrolled actors (Mahring et al., 2004). Occurrences of budget cuts in School Robin and School Kea prompted negotiations where the Finance Manager convinced the affected budget holders of the necessity of the cuts in order to keep the school financially viable. Negotiations, redefinition and displacement revolved around the principal subject of budgetary control practices. Where necessary, compromises and sacrifices were established. When a few active individuals were enrolled into the local network, they became the representatives of the many passive individuals and the spokespersons for the budget. The many budget holders, whether active or passive, were subsequently enrolled to the network with common interests. The Finance Manager was the spokesperson for the budget as well as the accounting technologies that represented the interests of all the actors in the network. The Principal had the assumed power over and control of the behaviours of the budget holders. This series of translations made the formation of networks of relationships with common goals and alliances of interests. The enrolment and then mobilisation has been transformed into active support of budget construction and its control system. It gained the properties of irreversibility (Sarker et al., 2006) and the budget became a black box[30].

In effect, the degree of alignment of interests was the extent of convergence of the actor-network in which diverse actors have been allied to include the spokespersons (the Principal and the Finance Manager), the enrolled actors (the Heads of Department/Faculty), the technological artefact (the budget document), guidelines, variance reports and policies and procedures. However Callon (1986) cautions that this alliance so formed can be challenged at any time; and translation becomes a betrayal. The black box was said to be re-opened. To prevent this, an obligatory passage point is required to stabilise the actor-network.

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[30] The Ministry of Education requires the school to show the original operating budget figures in the annual report. Analysis of Variance is then reported on why actual income or expenditure was different from the original budget.

6.4   Forming Alliances: An Obligatory Passage Point

Within the three schools under study, the alignment of interests in budget commitment established strong alliances among the Principal, the senior management, the Finance Manager and the board members. Their own self-interest was more or less easily aligned with the school's objectives with an understanding that they were held accountable to the Board and the central government. They were inclined to put aside their own self-interests and placed priorities that would bring the most benefits to the school as a whole.

However, these alliances alone would not institutionalise the budget execution. Most importantly, the middle managers (i.e. Heads of Department/Faculty) were the actors that needed to "buy in" for the success of budget development and management. The senior management believed that the realisation of budgeting was critical to the success of achieving annual targets. The Principal and the Finance Manager started the first round of negotiations with the middle managers to "sell" the budget to them for obtaining the benefits of a well-managed school budget. In School Robin, the active budget holders were critically concerned about their budget and would fight any reduction. They approached the Principal about any deficiency in the budget that would jeopardise the quality of education. The passive budget holders were those who were silent and would accept any budget they were given. Regardless of whether they were active or passive budget holders, the spokesperson (i.e. the Finance Manager) sought to devise strategies to convince these actors that budget cutting was necessary to reduce the budget deficit. Networks thus emerged through negotiations and were continually shaped by aligning interests of more and more actors. It was observed that the strength of the actors' interests in budgeting, their efforts to understand budgeting and their bargaining power in resource requests determined the stabilisation of the networks where an agreement among the senior and middle management was established.

It was believed that the budgeting system was the obligatory passage point that was necessary for satisfying the interests of all the actors (see Figure 7). By doing so, the Board and the senior management would achieve the annual targets in accordance with the school charter; the Heads of Department/Faculty could fulfil their dual roles

of curriculum delivery and financial resources management; with the accounting technologies the budget could allocate school resources in line with the annual plan; and the policies and procedures would provide guidelines for the budgetary process. The budgeting system became a mandatory and standardised routine – an obligatory passage point that all actors were persuaded to pass through for the durability of the network. The following sections illustrate how an obligatory passage point was formed in different schools.

6.4.1　In the Context of School Robin

In this section, a number of phenomena in School Robin which exhibited different outcomes of the obligatory passage point were examined.

6.4.1.1　Up to 2006: The Irreversible Actor-Network

The Principal of School Robin had been in his position for over 12 years in addition to his role as Deputy Principal for seven years. He was an influential figure at school for his controlling character. He was able to enlist the Board Chair and the key members at school. The work relationship between the Principal and the Board had been in harmony for years; it could be viewed as a tightly aligned actor-network consisting of the board members, the Principal, the senior management, the Finance Manager, the budget and the school policies and procedures. Each member of the Board assumed a taken-for-granted role that the Principal's decision was final and any challenges to his decisions would go to the Board.

> *The Board was very supportive over the past years. The Board Chair had strong skills in strategic planning and I ended up thinking along his lines. We were able to compromise and we went forward together and had gone through some difficult financial challenges…. You (the school) did have some key goals that you were working towards. By and large what they (the Board) wanted to see was in line with the overall finances, in line with the overall policies. If you had a problem half way through the year that was going to blow the budget, you go back to the Board and tell them that had happened. We [the Principal and the Board] would make a solution together, but they [the Board] wouldn't bother about the detail. There are bigger things for them to think about.* (Principal of School Robin)

Problematisation started with the development of the budget which was generally operated by the Principal together with the Finance Manager. Budget revision involved the senior management only for the sake of efficiency. Experience had taught the budget holders (the Heads of Faculty/Department) that school resources were contestable and were centrally controlled by the Principal. It was concluded by the Principal's critical remark, "The CAM's participation in the budget setting process is irrelevant; the final decision must always come from the top." The strong power relationships between the Principal and the Board had made the actor-network stable keeping the budget holders in place without controversies. Both interessement and enrolment was passed through. Once the budget was finalised and approved by the Board, the network reached the stage of mobilisation. The budget was black-boxed and irreversible. The Finance Manager was the spokesperson for the budget and advocated the budget to the budget holders. All the actors in the network had passed through the obligatory passage point.

6.4.1.2   From 2007 to 2008: Bringing New Allies

While preparing the budget in September 2007, the Finance Manager understood that the existent budget actor-network might not be stable for long as it did not recognise the significance of a number of human actors who had influence on the outcome of the budgetary process. They were the Heads of Faculty/Department whose individual interests could be temporarily aligned with the budget as long as their interests were accommodated. However, it was not always the case that their interests were satisfied. Resistance and resentment would arise when individual interests did not converge. The Finance Manager decided to include the Heads of Faculty/Department to participate in the budget preparation for the school year of 2008.

> *Despite the establishment of responsible areas, budgets are predominantly set by the senior management without meaningful participation and consultation from the budget holders. The Principal is always the final decision maker on allocating budgets to learning areas…. We [the Principal and the Finance Manager] set the budget first and revise it when there is new information coming through. The Principal had prepared the school budget for years, so he is the best informed as to needs and resources*

available at school. Although challenging the status quo was rare, dissatisfaction about not being involved in budgeting was sometimes heard…. I still believe that participative budgeting encourages budget holders to take ownership of their budget. I will get them included in this year's budget setting exercise. (Finance Manager of School Robin)

Problematisation was identified in the face of managing each actor's interests by the Principal. He addressed the problem by enrolling the budget and the Finance Manager, anticipating that everyone would have agreed on the budget after any kinds of challenges and disagreement were settled.

At this point, interessement began. The Principal realised that convincing all heterogeneous actors with diverse interests to agree on the budget targets was not easy to achieve. His power and authority would also be challenged by the budget holders who were not satisfied with their allocated budget.

The senior management needs to recognise that the Heads of Department know their needs…. They [the senior management] propose the budget but maintain the status quo in budget allocation. They need to revisit and align with the Ministry of Education's recommendation to consult the budget holders. (Head of Mathematics, a passive budget holder)

I request and justify things for my budget and they are usually ignored or overlooked. It's hard to justify spending to the Finance Manager as he doesn't seem to understand our needs…. It seems like decisions are made without input or consultation from the CAMs. There is lack of communication. (Head of Arts, a passive budget holder)

The Principal devised the interessement strategies. He aligned the interests of the active budget holders who would pose less resistance to his decisions. Generally speaking, the active budget holders were Heads of Hospitality, Music and Sports which either had records of high student achievement or were popular departments in the eyes of the Principal. These active budget holders were seen to approach the Principal more often to voice their opinions and suggestions. These departmental heads argued that they deserved a greater share of financial resources which would be used for enhancing their achievement and rewarding their hard work.

Our department has been working very hard to get students achieved…. We took part in competition of all sorts for students to gain practical experience. It'd been a very successful attempt that we won many awards regional and national over the years. The growing number of students in taking Food Technology as an option has no comparison with other departments that drop in number. An increase in budget was necessary to cater for the popularity of this subject. We would like to see this programme continuously succeed. (Head of Hospitality, an active budget holder)

The Principal successfully enrolled these active actors by allocating additional budget to their areas in both operating and capital. The Department of Hospitality was allocated a capital budget to modernise the training restaurant; the Department of Music was given a budget to renew the musical instruments; and the Department of Sports could access the Principal's discretionary funds that were budgeted for providing financial assistance to sport teams to go to the regional or national tournaments. These actors became the speakers of the focal actor to negotiate with the other actors.

On the other hand, the heads of learning areas with low student achievement formed an alliance among themselves and proposed initiatives that would improve the student achievements, which in turn could establish a reason for more resources. The Head of English allied with the Head of Arts in making a case to the Board for purchasing digital cameras. They believed that the alliance would strengthen their bargaining power over the resource contest. This alliance strategy had been observed successful in most instances. In effect, the alliance they formed had created stronger relations of power than the other Heads of Department who were acting in their own right. The other passive budget holders who had less or no influential power over budget allocation remained silent about their budget allocation. They believed that the budget decision making was highly centralised and could not be challenged in any way.

To strengthen the enrolment, it was necessary to have a high degree of alignment among the actors in the network. At this stage, enrolment became a complex process as parallel attempts of enrolment were apparent in different groups of budget holders whether active, passive or allied. Budget holders of areas with high achievement demanded a greater share of resources; the budget holders of low achievement

sought allies to strengthen their bargaining power; the passive budget holders of no achievement that had no "power over" (Stanforth, 2006, p. 51) expressed their dissatisfaction by keeping silent. The unbalanced power within the actor-network made the mobilisation longer to complete. The Finance Manager, the spokesperson of the Principal, employed trials of strength to align the individual interests to the school's budget targets. The Finance Manager confronted the budget holders' demands for additional budget by suggesting a meeting with the Principal. After a series of meetings, the budget holders' voices were listened to and acted upon; their counter claims were addressed. The Heads of Faculty/Department's participation in the budgetary process received positive feedback.

> *The Finance Manager and I do discuss requirements in the department; however, budget has always been very limited. Budget decisions are discussed within the department daily to make sure we are keeping track of spending.* (Head of Hospitality)

> *Budget related issues are always discussed with the Finance Manager. Most materials are adapted to suit individual needs. Textbooks are important but are always adapted.* (Head of Special Education)

> *I was very concerned about the budget and had input at the end of last year. My input was valuable; changes have been made and it is much better this year. We work closely together with the Finance Manager and are able to discuss about budget performance, so that I can monitor the budget closely.* (Head of Physical Education)

A continual process of redefining the role of the budget holders and activities of renegotiating, convincing and enlisting actors were undertaken. Finally, the budget holders who were powerful allies in supporting the budget were engaged, mediated and translated. The relations of these heterogeneous actors made their diverse interests converge and hence it produced a durable actor-network.

At this point, the actors were stabilised in a network for the same reasons and interests whereby they had passed through the obligatory passage point necessary to articulate their relative identities. The success of interest alignment could be explained by the fact that the Principal successfully enrolled the Finance Manager and the budget and their alliance was integral to sustaining the network. The Finance

Manager became the representative of the budget that held actors in place and made the budget black-boxed.

> *This year I can see that the budget holders are learning how to prepare and manage their budget. They seem to be very excited about this budgeting exercise. If they are stuck with the budget, they will come to see me for solutions. Our conversations are open, honest and constructive. I totally understand their position as a teacher who requires resources to support their teaching. Unfortunately, school resources are limited and priorities are necessary. Sometimes, we negotiate that an increase of budget in one area will be offset by a decrease in other areas…. I believe that the budget holders understand my role of managing the school finance to make sure all areas are looked after.* (Finance Manager of School Robin)

Equally important, the budget, a non-human actor, enrolled human actors through a series of identity redefinition, displacement of multiplicities, and continuous renegotiation. Throughout the year of 2008, all budget holders were abiding by the budget in accordance with the policies and procedures ensuring the school's financial sustainability. The actors were closely aligned and could be viewed as a punctualised actor within the network. Figure 8 and Figure 9 compare the actor-network in the budgetary process before and after the admission of new allies.

Legend:

⟷   **Interests Alignment**

◄ - - ►   **Actors Omission**
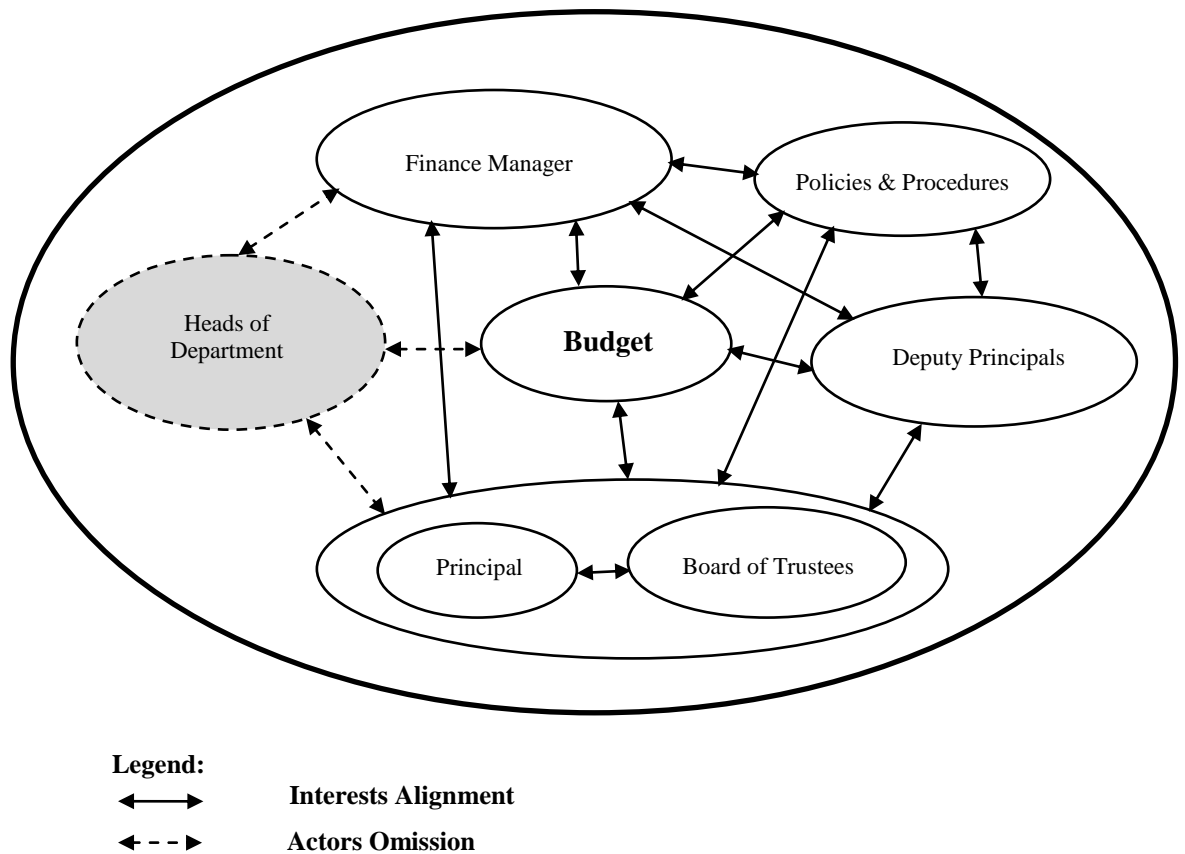
Figure 8. School Robin – An actor-network theory view of the budgetary process before the entry of new allies
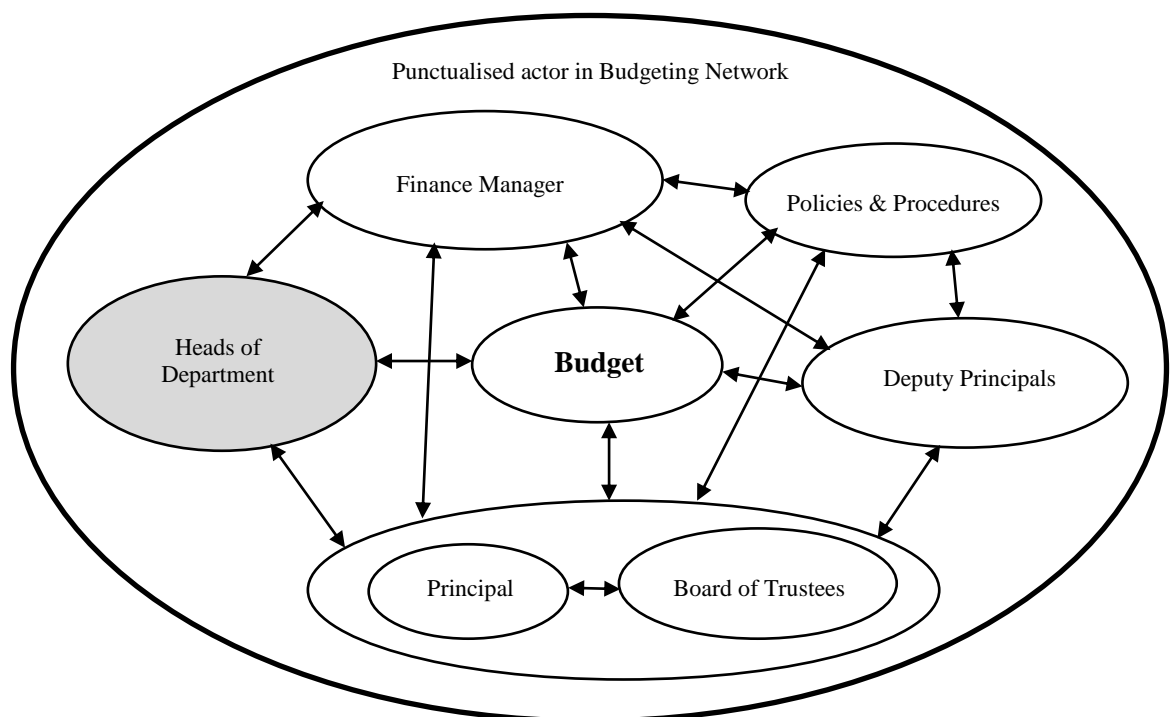
Figure 9. School Robin – An actor-network theory view of the budgetary process after the entry of new allies

6.4.1.3　From September 2008 to 2009: Deficit Budget and Stakeholder Engagement

(1) Deficit Budget – School Robin experienced two good years in 2007 and 2008 with a substantial increase in the accumulated reserves. The Principal believed that education was the core business of the school and that the school reserves should be used to benefit the students. Problematisation began in September 2008 when the Principal proposed a deficit budget of $283,400 after depreciation for the 2009 school year. The Principal's proposal was out of character as it was inconsistent with his conservative budget approach over the previous two years.

> *It's difficult to comprehend why the Principal proposed a deficit budget. The roll is dropping; a deficit budget will surely eat the school reserves that are used for rainy days. Last year, more than $70,000 was returned to the Ministry as the actual roll was below the roll that was forecasted. Nobody knows what the exact roll next year will be as it fluctuates from year to year, from month to month. You may argue that a one-off deficit is alright as you spend the surplus for the student needs, particularly in literacy under our situation.* (Finance Manager of School Robin)

School Robin had been experiencing declining roll and the budget was set prudently for the previous two years aiming at a balanced budget. The Principal's justification for a deficit budget was supported by investing the school reserves for the benefit of the students through employing additional teachers to raise the student engagement. It sounded pedagogical but it lacked strategic vision of organisational sustainability and financial viability. The Principal's argument for a deficit budget was so strong that the notion of punctualisation could be applied to the Principal and the deficit budget.

> *We have a large sum of money sitting in the bank. One day the Ministry may query us what the money is saved for. It's sensible to invest the reserves for our students. The school's immediate need is to employ four additional teachers to raise the student literacy level. Small class teaching will be put in place next year to increase the contact time with each student. We received a strong demand for small classes from the teachers. As a responsive principal, we need to address the student needs. In fact, raising the student literacy is one of our annual targets in the school charter. Remember, our students are struggling to achieve.* (Principal of School Robin)

Interessement involved the process whereby the Principal attempted to convince the Board that his ground for a deficit budget was feasible given a substantial level of accumulated reserves. It was noted that it was the first time for the new Board Chair, who took the chairmanship in September 2008, to discuss the school budget. The Principal understood that convincing the Board of his proposal required the technicality to explain the consequences of the deficit budget. He enrolled the Finance Manager to "sell" the deficit budget to the Board with the idea that the deficit was used to account for the accumulated surplus which was intended to benefit the students themselves. At the Finance Committee meeting, of which the Board Chair was also a member, the Principal explained that the deficit budget was developed in line with one of the strategic objectives which was to raise the student engagement. Four additional teachers would be recruited to allow for small class delivery. From the perspective of an accounting concept, the Finance Manager further explained that the deficit was wholly funded by the depreciation expense which was not a cashflow item. The depreciation expense was budgeted for $282,000 which was just to cover the budget deficit of $283,400. After several rounds of "Questions and Answers" from individual committee members, the Finance Committee finally recommended the deficit budget to the Board for approval. After a series of detailed discussions and debates, the Board finally approved the budget. The alliance between the Principal, Finance Manager and the deficit budget was so strong that the deficit budget – a non-human actor – became a financial resource for School Robin to achieve student engagement.

Actor enrolment was very successful, as the budget holders were allocated a similar amount of budget as the previous year though the school was facing a falling roll. The Principal and the Finance Manager simply spent time in distributing the approved budget to the Heads of Faculty/Department and no resistance was encountered. Mobilisation continued with the growth of the network of interests in the deficit budget which was aligned with individual interests. The deficit budget was finally black-boxed.

(2) Stakeholder Engagement – Since the deficit budget was black-boxed in December 2008, the focus in boardroom discussion was shifted from deficit budget to strategic plans and then to stakeholder engagement. In the summary report of the

Building Partnerships Project, the Board Chair made comments on the importance of stakeholder engagement:

> *In May 2009 the Board of Trustees started the Building Partnerships Project. Although this project began with the Board's desire to consult on the school's emerging strategic plan, a change in the Board's thinking saw the design of the project expanded to focus on engagement through building partnerships. Led by a professional team, four workshops with students, staff, parents, whānau and community members were jointly funded and supported by the Board…. Community involvement works both ways. There was limited understanding of this amongst the students and staff but it is an important step in creating better community relationships, working with the new curriculum and giving students an opportunity to learn more about the community in which they live and will work in. There are community members and networks that want to work with the school in both of these ways.* (The new Board Chair of School Robin)

Prior to stakeholder engagement, Figure 10 resembled those of the actor-network which was confined to local actors, ignoring the needs or considerations of global actors such as parents and community members.

Problematisation began when the new Board Chair started his term in September 2008. Since an important actor (i.e. the new Board Chair) in the network of aligned interests had changed, the boardroom discussion had shifted from budgetary control to strategic planning. The new Board Chair realised that significant changes to the school culture was necessary for the best interests of the students. The school's mission, vision and values needed to be revised. To achieve this, the school needed to engage a wide range of stakeholders to consult on the school's emerging strategic plan. The Board decided that the design of the consultation process was expanded to focus on community-wide engagement through building relationships and partnerships. "This is an exciting and ambitious step forward for the school and its whole community", remarked the new Board Chair. The new Board Chair's ideology of stakeholder engagement was, however, not supported by the Principal who believed that the school itself should have control over its directives in terms of pedagogy and goal setting. This disparity had sown the seeds of betrayals. There followed a major controversy concerning the shift of the focal actor. The loss of power of the Principal in the boardroom gradually unfolded.
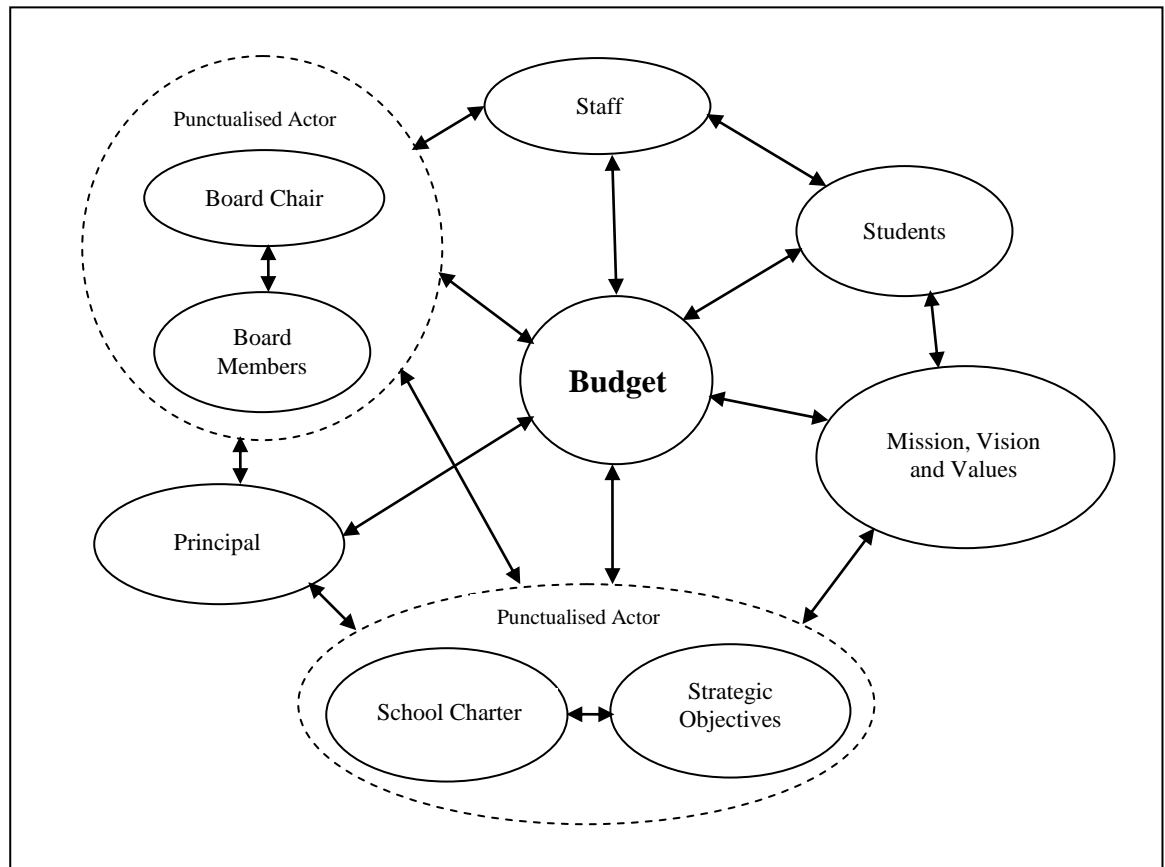
Figure 10. School Robin – An actor-network theory view of pre-community engagement partnership network – exclusion of parents and communities

Interessement involved the actions of engaging wider stakeholders to consult on the school's strategic plan. The Board made a set of deliberate decisions which revolved around stakeholder engagement, community partnership and staff participation. The Community Engagement Partnership Project was endorsed by the Board in May 2009. The Board believed that this initiative would make a radical change for the school in earning its reputation and raising its profile. This project was made as public and high profile as possible. A number of workshops were held at the school where students, staff, former students, parents and community members had a say about the future of the school that would make the young people achieve their dreams. An invitation to the public was published in the local newspapers. The inscription of stakeholder engagement was in the form of board newsletters that were distributed regularly to all stakeholders to update them of the project. Indeed, positive feedback was received from various community groups including

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government agencies. New allies were successfully locked into place. These negotiation strategies enabled the enrolment of many actors into the new networks.

Enrollment occurred as interessement was successful. The school's strategic focus on stakeholder engagement was pervasive to the extent that almost all stakeholders were enrolled to the exercise in various forms: participating in the stakeholder engagement workshops, redefining their roles in contributing to the success of the school, and providing inputs in driving the school's future directions. The impact of the Stakeholder Engagement exercise had brought the benefit of an increased awareness of stakeholder participation and involvement in the school's strategic directions. Although the alignment of individual interests to the school's strategic directives was far from uniform, rationalisation of individual actor's interaction was an important step ahead.

It was worth noting that the Principal was staying passive throughout the Community Engagement Partnership Project. He often kept silence, holding back his opinions in the boardroom discussions and even sometimes he was excluded from the community events and functions. He complained,

> *I felt I was hijacked by the Board as decisions were made by the Board without my knowledge. He [the Board Chair] approached my staff directly, and I wasn't informed of what issues they were discussing. I am the school's Principal to manage the school, not the Board. I don't think my working relationship with the Board is going to work. There was no trust between us.* (Principal of School Robin)

In the absence of support from the Principal, the new Board Chair believed that he could convince the rest of the board members and the staff to become allies of his network. The new Board Chair understood that stakeholder engagement was a continual process; it was about building relationships with heterogeneous stakeholders and managing their resistance. Individual values, subjectivities and interests had to be translated and conflicts needed to be harmonised. To gain support from diverse groups of stakeholders, the new Board Chair, together with board members, actively participated in school and community functions meeting with staff, students, parents and community members. They listened to the stakeholders' concerns, acted on their ideas and provided feedback regularly. In this way, the new

Board Chair held these stakeholders together in a form of relational network structure. The success of the new Board Chair's efforts rested on his ability to recruit network allies by integrating the strategic objectives of the school into the stakeholders' individual interests. These stakeholders were convinced that developing the school's strategic directions would bring benefits to the wider community – raising student achievements and increasing student employability.

Mobilisation sought to secure continued support of the Community Engagement Partnership Project. The outcome of this project was the re-development of the school's "mission, vision and values" which were visible and explicit in everything the school did. The "mission, vision and values" also provided directions to the Board in forming the school charter and its strategic objectives. The budget for the following year would be constructed in line with the new set of strategic objectives in the school charter. From there, four focus groups were established to further the work that had been achieved through the students, staff and community workshops. These groups comprised a student group, a staff group, a Pasifika group, and a Māori group. A board member was also part of each group. The actors of these groups had become the spokespersons of these heterogeneous networks to drive the future directions of the school. Clearly, the actors in the networks were convinced that their inputs would lead to changes to the school.

> *We have made a firm start and the concept of partnership will be integrated into the values and strategic objectives of the school and the way it conducts itself in every way. We must build a strong 'inclusive' foundation and work with the information, ideas and offers of help that have come from workshop participants…. There are many changes happening within the school as we put in place the pathways towards building an extraordinary vibrant and progressive student-centred learning environment.* (The new Board Chair of School Robin)

Contrastingly, the Principal's tie with the new Board Chair was distant because the non-alignment of interest had pulled them apart. Concurrently, the other board members redefined their role and joined the new network enrolled by the new Board Chair. To this point, one may ask: What constituted the new network so that the interests of the heterogeneous actors were made aligned? That was the inscription of the school's "mission, vision and values" – a technological artefact that tied together

actors with diverse individual interests. The new Board Chair became the focal actor at School Robin to drive the changes. The translation process extended to the staff, students, parents and wider communities.

To the staff, the "mission, vision and values" were conceived as an obligatory passage point that would assist in raising student engagement and achievement. The school's mission, vision, values and its strategic objectives were perceived as a visionary artefact that had the highest level of cognitive legitimacy within the school. The new Board Chair brought the actors together in the network ensuring all actors were acting towards the same direction. Policies, procedures, behaviours and goals were translated from one actor to another; and actors themselves interacted with others of common interests (Callon, 1986).

To the students, parents and community members, the new Board Chair was always seen there to support them by listening to their opinions and providing feedback to them. Ongoing communication and interaction within the four focus groups was undertaken. The ideas of these focus groups were fed back to the Board for thorough deliberations. The Board believed that the school's strategic objectives were meeting the community's needs and demands. This made the "buy-in" process possible as individual interests became inter-relational interests that could be connected.

It could be said that School Robin's mission, vision and values were made real and visible by inscription as a collection of "common and strategic goals" that linked the stakeholders to the school's future directions. They were made universally understood and accepted, which enabled stakeholders to talk about, take ownership and act upon them. This was institutionalised by a continual translation process that involved attending and accommodating stakeholders' needs.

Focus group meetings, committee meetings, board newsletters and Principal evenings were instances of communication venues where people could talk about mission, vision and values and how they could be put into practice. These practices constructed visibility which enabled the engagement of actors who were continually mediated and translated. It not only helped actors make sense of strategic objectives, but also provided them with opportunities for different views. The school's mission,

vision and values became a living document that could engage and mobilise actions into actors, whether human or non-human. This extended to networks of relations in one form or another. These networks of relations did not stop. The stability of the networks required constant mediation, negotiation and engagement to displace actors' interests and induce them to pass through the obligatory passage point in order to achieve the desired results.

Who was driving the changes? It was the new Board Chair, a focal actor and a spokesperson who was able to convince stakeholders by offering them a solution to raising student achievement, which was a common goal to diverse groups of stakeholders. The new Board Chair was charismatic with the powers of vision, determination and persuasion. During a staff briefing, he remarked,

> *To make the school succeed, we must be on the same page…. The Board is committed to ensuring that the concept of partnership is integrated into the values and strategic objectives of the school and the way it conducts itself in every way…. The Mission, Vision and Values will be visible and explicit in everything we do.* (The new Board Chair of School Robin)

This strong message had been diffused into day-to-day work practices at the school. At this point, the closure of the controversies over the future directions of the school occurred when the focal actor had satisfied individual interests. Alliances were formed through "the continuity of displacements and transformation" (Callon, 1986, p. 213). The new Board Chair had translated the core views of the school community into the school's mission, vision and values, which could be collectively defined as "an obligatory passage point in the network of relationships they were building" (Callon, 1986, p. 201). It was concluded that the initiative of stakeholder engagement was made successful by a variety of actors whose interests were strengthened in the association of networks. Figure 11 provides an ANT view of the Community Engagement Partnership Network connecting School Robin's mission, vision and values with its stakeholders including staff, parents and community members except the Principal.
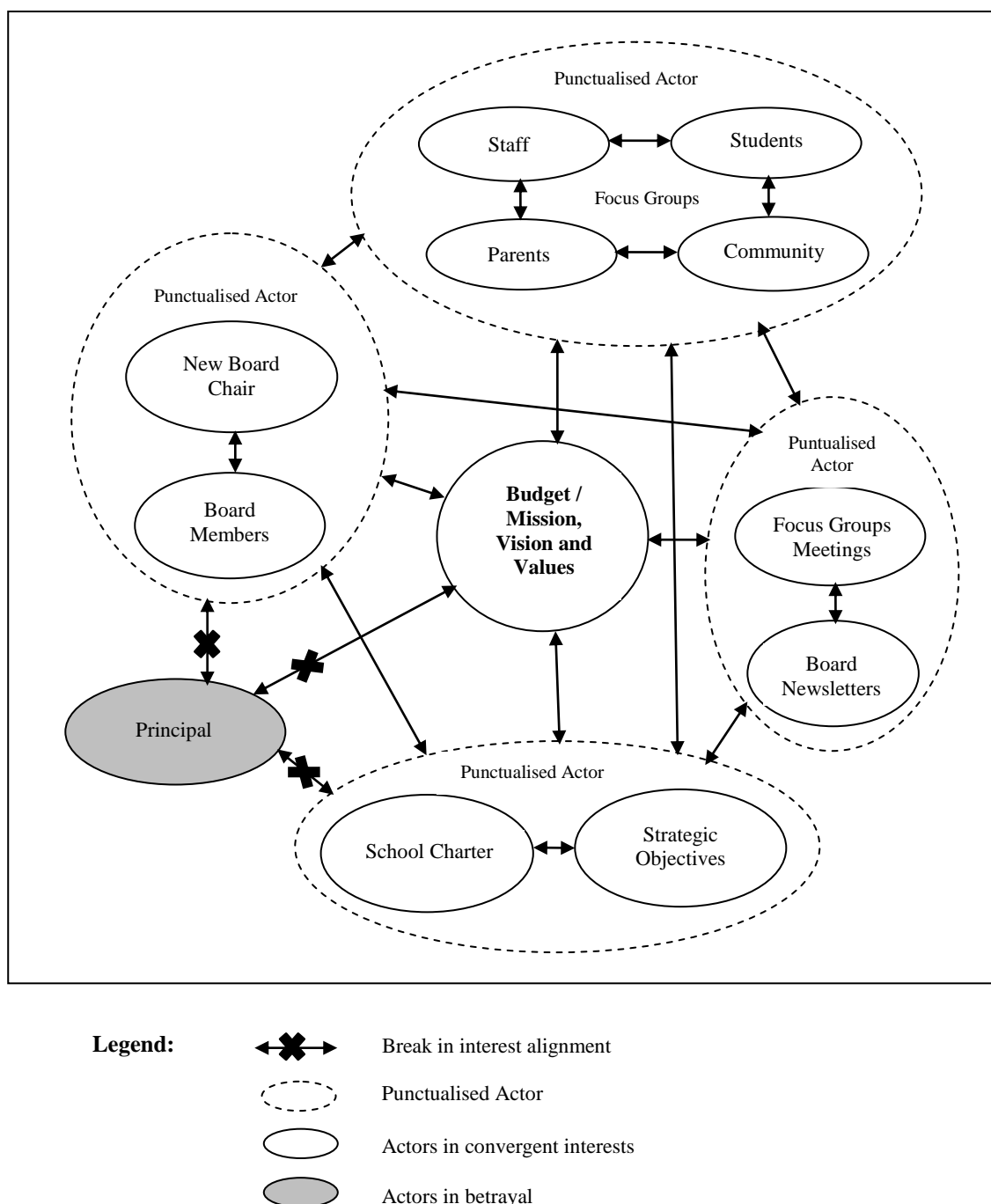
Figure 11. School Robin – An actor-network theory view of the community engagement partnership network – inclusion of parents and communities

6.4.1.4   End of 2009 – Open to Betrayals

The Board remained complacent about the belief that consuming more financial resources would bring a better future to the school, hence boosting the roll. Owing to the success of the Community Engagement Partnership Project, the Board

anticipated that the amount of resources invested in the project would be rewarded by bridging the gap between the parents, the local communities and the school. There was universal consensus that better stakeholder engagement would improve parent involvement, student engagement and hence student achievement. Unfortunately, the trend of declining roll was still anticipated in 2010 according to the provisional roll provided by the Ministry of Education. It meant that the government funding would decrease in proportion to the dropping roll.

Despite the financial constraint, the Principal, who enrolled the Finance Manager, continued to propose a deficit budget of $230,000 for the school year of 2010. The budget was approved by the Board on the belief that more resources invested would bring in better outcomes. In effect, the 2009 deficit budget had a minimal flow-on impact on the cash position. At the end of 2009, the size of the school reserves was decreased by a tolerable level of 3 percent compared to the previous year (see Table 18). This made the Board confident that another year of deficit budget was practical. However, one critical aspect of controversy was the early retirement of the Principal. He would finish his principalship in School Robin at the end of 2009.

Table 18. School Robin – Financial summary between 2008 and 2009

Year	Reported Surplus / (Deficit)			Reported Cash and Investments		
	Actual	Budgeted	Variance	Actual	Budgeted	Variance
2008	49,341	16,000	33,341	1,383,085	1,071,400	311,685
2009	(107,005)	(283,400)	176,395	1,343,700	1,076,899	266,801

Year	Reported Working Capital			Reported Non-Current Assets		
	Actual	Budgeted	Variance	Actual	Budgeted	Variance
2008	1,150,798	1,044,016	106,782	2,699,342	2,701,600	(2,258)
2009	1,121,504	901,157	220,347	2,632,488	2,701,600	(69,112)

The Principal publicly explained his departure in the school newsletter:

> *It would be unfair on students, staff, parents, and the wider community to start the process [development and drive for a new strategic direction for the school] and then pass the baton on. I feel the timing is right for the Board to search for a new Principal who has the passion, empathy and drive to lead this vision [an extraordinary, vibrant, and progressive student-centred learning environment], which is supported by the whole school community.* (Principal of School Robin)

The new Board Chair responded in the Board Newsletter:

> *The Principal's decision to retire has been influenced through the development and drive for a new strategic direction for the school. The Board requires full support in the development of a new vision for "an extraordinary, vibrant, and progressive student-centred learning environment". The Principal has decided he cannot commit to driving this vision forward over the next five years. He supports the Board in searching for a new Principal who has the passion, empathy and drive to lead this vision which is supported by the whole school community.* (The new Board Chair of School Robin)

The differences between the Principal and the new Board Chair in leading the school's strategic directives had sown the seeds of separation of the two parties. From the outset, the Principal did not support the Stakeholder Engagement Partnership Project. He remarked:

> *I'm old fashioned. I agree with consultation. I don't agree with consensus decision making and our people don't understand the differences sometimes. I think you can go and seek information and opinion like the government, but ultimately they are charged with making the decision. And the worry is when we didn't do it well enough. When you ask your community and they say, "We want a big new gym and we want whatsoever"; and you can't deliver and they get disappointed and angry. They feel you are not taking any notice of them. So it is a very difficult balance to get I think.* (Principal of School Robin)

In addressing his opinion on stakeholder engagement, he continued:

> *Whilst I'm a great believer in dialogue and information and keeping people informed, this whole notion of consultation in my view has been hijacked. People don't fully understand; because I'm being consulted it means what I want should happen. And that happens across all walks of life and that's*

> *what you need to be wary of because it just causes more and more stress and anger I think.* (Principal of School Robin)

With his departure, the Principal's tentative enrolment with the deficit budget was terminated. His leaving was a betrayal of the punctualised network with the deficit budget and the school network as a whole. From this point onwards, the legacy of a powerful actor ended. The Principal's betrayal would lead to a failure of the translation process. The second wave of controversies and challenges was about to unfold.

6.4.1.5   During 2010: Controversies Continued

Since the Principal had left, the school lacked a leader to monitor the actor-network; the network became fragile and had a tendency to degenerate. The Board realised the urgency of recruiting a new Principal to the network that could keep all actors in place.

> *The most important decision this Board will make, is to ensure that we appoint the best possible Principal for the school, someone who has the appropriate skills to lead and manage the implementation of the strategic plan, build lasting partnerships with the school community and provide inspiration to students and staff.* (The new Board Chair of School Robin)

Advertising for a new Principal was underway immediately and an Acting Principal took up the position in late December 2009 before a new principal was recruited. The tenure of the Acting Principal would finish when the new Principal started.

At the start of February 2010, new programmes to raise student engagement, such as employing counselling workers and launching whānau days, were initiated by the Acting Principal. The budget for these programmes was built in by compromising budget cuts in other budgetary areas. These further cuts to the budget were a hard hit to the Heads of Faculty/Department who had been struggling to cope with the decrease of financial resources over the past years while managing the new curriculum.

The Heads of Faculty/Department held meetings together to put forward a counter-budget proposal to the Acting Principal for expressing their concerns about the budget cut. The Acting Principal started a series of negotiations of all sorts which attempted to pacify these controversies. The representative of the budget holders had become influential as she was the spokesperson who reassembled the dispersed actors of divergent interests. This made displacement easier and translation possible by negotiating a punctualised actor. These controversies were finally closed when consensus was achieved on the promise given by the Acting Principal that the amount of the budget cut would be compensated by the same amount of increase in the budget for the following year.

Problematisation constituted the delivery of a budget cut to dissenting budget holders by the Acting Principal. The Acting Principal, as a focal actor, defined the problem in terms of the need for improving student engagement that had held back student achievement. The focal actor was able to draw the other actors together through the obligatory passage point by taking advantage of successful stakeholder engagement. However the actors' faithfulness did not last long.

Soon after, a new Principal was finally recruited and he started in April 2010. The new Principal soon became the representative of the Board to carry out the school's strategic directives in terms of its mission, vision and values. He was also the focal actor to deliver the deficit budget to the budget holders. During a briefing to introduce the new Principal to the staff, the new Board Chair remarked:

> *The school roll continues to decline…. It [our roll] is our main source of income and gives the Board the ability to deliver against our stated vision, mission and objectives. Notwithstanding our revenue issues, the Board needs to address its expenditure and ensure that budgets are projected realistically. While the actual 2009 deficit was less than the budgeted deficit, we cannot continue this practice in 2010…. The Board is also reviewing the recruitment of international students as this has declined considerably over the past years. This initiative has the potential to generate revenue in the future to help sustain the drive towards our vision…. The Board has worked closely with our staff, our students and our community to set ambitious goals for the school. Achieving these goals will require leadership that is challenging but consistent, inspirational but pragmatic, demanding but supportive. We [the Board] believe that [our new Principal] is improving the*

learning opportunities for all students to reach their potential. (The new Board Chair of School Robin)

Soon after the new Principal started, the Heads of Faculty/Department continued to challenge the budget, which they perceived as insufficient for preparing new curriculum while raising student achievement. They all hoped that the new leader of the school would have open lines of communication and appropriate allocation and management of resources.

> *Changes are taking place in 2011 with the new curriculum and we are under-resourced for this change. We need textbooks to accommodate the changes in the senior curriculum. Lots of the equipment are dated and they need replacing, but with budget cuts we have been unable to do it in the past two years.* (Head of Science)

> *The budget in my area is inadequate. It has been static without increase and this further cut has put limits on programmes delivered. I have proposed for more computers in the past two years, but nothing happened. I have surveyed other schools and my budget is the smallest compared with schools of even a smaller size.* (Career Advisor)

The new Principal lacked knowledge of accounting technologies and budget management. He failed to enrol the Finance Manager who was the spokesperson for the budget. Without the knowledge of the Finance Manager, the new Principal mis-interpreted the savings from not recruiting additional teachers in 2011 and promised the budget holders that the savings would be used to increase the budget in the curriculum areas. This pre-mature promise had prompted the Finance Manager to question the feasibility given the declining roll and shrinking government funding. The Finance Manager expressed his concern:

> *It seems there is a communication breakdown between management. Most of the times, the information I obtained is from the second hand source. For example, the Head of ESOL came to my office one day and told me the Principal has approved an increase of budget in her area. I just wondered where this increase could come from. Running a deficit budget for two consecutive years, there is no room to increase the budget half way through the year. I do not get an answer for this increase from the Principal. Managing the budget is now out of my control as there is no discussion with me prior to decision making.* (Finance Manager of School Robin)

Worse still, the new Principal failed to use any trials of strength to associate himself with other actors. This allowed diverse interests to diffuse among the budget holders. These heterogeneous actors were scattered and they competed with each other for resources with an envy that an additional budget had been allocated to ESOL only. They feared that one area with a budget increase would be compensated by other areas with a budget cut. The budget holders were seen lining up in the new Principal's office to have their say.

> *I need an assurance from the Principal that my budget won't be cut again. No replacement for the broken equipment will likely create health and safety issues in the science lab.* (Head of Science)

A few months later, the new Principal suddenly withdrew the promise made by the Acting Principal without consultation. That meant the amount of budget cut this year would not be compensated by the same amount of budget increase for the following year. It became clear to the budget holders that the new curriculum would not be delivered according to their plans and would require further compromises. They had a big concern over the quality of curriculum delivery under the limited resources. Dissatisfaction among Heads of Department/Faculty was widespread.

> *There are no computers, as promised, in the staff work area. Space will be available for a student computer room if we have the resources…. The budget was cut significantly between 2008 and 2009. It was then cut again between 2009 and 2010. It was then cut further at the start of 2011. Hence we got dated equipment.* (Head of Science)

> *Currently, we need to replace the 30-year-old sound system that does not work in the drama room. We also need to replace the broken sound system in the dance room. I'm afraid they can't be replaced this year.* (Head of Drama)

> *I was not informed of the 10% reduction in budget, just stumbled across it when the statement didn't reconcile with my records.* (Head of Library)

The new Principal, by not performing according to the promises of the Acting Principal, did not make the interessement happen at school. Lack of communication between the management and the staff was suggested as the problem. Individual actors started exhibiting deviated behaviour in that they failed to ally with other actors. Barriers of enrolment were constructed among the actors. The difficulty of mobilisation was the contested actors who maintained their self-interest by failing to

manage spending within budget. The active actors such as the Head of Hospitality and the Head of Music complained about the withdrawal of support from the new Principal. On the other hand, the Head of ESOL was allocated a budget to renovate the classrooms anticipating that it had the potential to generate revenue in the future to help sustain the drive towards the school's vision. The passive actors, the Head of English, Head of Learning Support and Head of Technology tendered their resignations, leaving School Robin before the end of 2010.

Obviously, the focus on school resources had been shifted from those areas of high achievement to student support programmes. The student support programmes initiated in 2010 included recruiting one additional counsellor and one more social worker, Student Pathways into Universities, the Parents Conference and revamping the International Students Programme. These initiatives were fully supported by the Board with a view to increasing the student engagement. The success of the Stakeholder Engagement Partnership Project was evident in 2010. The parent engagement was improved significantly in a way that the number of parents attending the Parent Conference increased from 21 percent in 2007 to 55 percent in 2010.

The pleasing result in parent engagement was a contrast to that of the staff engagement. The failure of the staff engagement was due to the fact that the focus on budget allocation had been diverted from the traditional practice that was targeted to the areas of high achievement. Instead, the new Board Chair engaged with the new Principal in allocating more resources to student support initiatives. This shift did not serve the interests of the actors in the old network. With the initiation of student support programmes, the new Principal, as the focal actor, created a new actor-network by removing actors in the old network and recruiting some of these actors into the new network. This caused betrayals to occur.

Another explanation of the betrayals was the lack of a spokesperson who spoke on behalf of the focal actor and the other actors. A spokesperson was important, particularly when the focal actor of the network changed. The focal actor in School Robin had changed four times – from the long enduring Principal to the new Board Chair, to the Acting Principal and to the new Principal. The transition between the

exit and entry of a focal actor required the effort of monitoring the actor-network to ensure the successfully enrolled actors were kept in place. The effort of a spokesperson or a durable material served this function. The lack of a spokesperson, such as the Finance Manager, in the activities of budget negotiations and interest displacements made it difficult for enrolment and mobilisation to occur. The Finance Manager, who had the technical expertise, could talk in the name of negotiations and adjustments that would ally the actors. The success of enrolling new actors by the Finance Manager over the past three years was evident.

It was also noted that an actor-network was subject to continuous mediation as the constituencies in the network changed over time. An exit or entry of an actor could fluctuate with the order and stability of the network. Thus the presence of a durable material was paramount to provide greater stability to the network. The deficit budget for 2010 was not inscribed in a durable format; it was only agreed tentatively by the actors. The irreversibility of the inscribed interest could be challenged when there was a move in the network. Finally, the already fragile actor-network disintegrated with the betrayal of the Finance Manager who left School Robin at the end of 2010. His reason for breaking up the actor-network was clear from his critical remark:

> *I don't think my role at the school is perceived important any more. In many occasions, [the new Principal] made decisions without my knowledge. One day, he increased the budget to an area he preferred. The second day, he decreased the budget in another area. His decisions on budget reallocation had upset so many people…. Also the teachers complained about no staff consultation on matters. This is why a number of long service teachers are leaving. They are not happy about the Principal's dominating management style. To be honest, it is so sad to see them leaving. Over the past years, we have developed a win-win partnership work relationship. We discussed over budget issues and sorted them out together. Maybe it is time for me to move on.* (Finance Manager of School Robin)

The obligatory passage point had never been attempted; the deficit budget was never enrolled into the network. The notion of stability or faithfulness (Briers & Chua, 2001) failed to translate the diverse actors and keep them in place; the presence of "competing parallel interests" (Sarker et al., 2006, p. 81) disabled the formation of punctualisation and the interaction between humans and non-humans.

Legend: ✖ (↔) Break in interest alignment

⟨dashed ellipse⟩ Punctualised actor

⟨white ellipse⟩ Actors in convergent interests

⟨grey ellipse⟩ Actors in betrayal
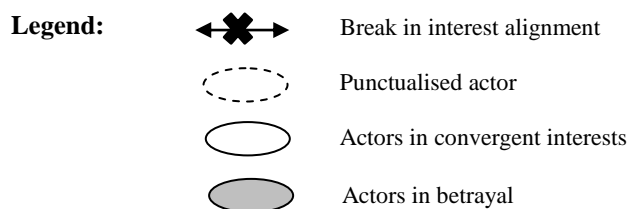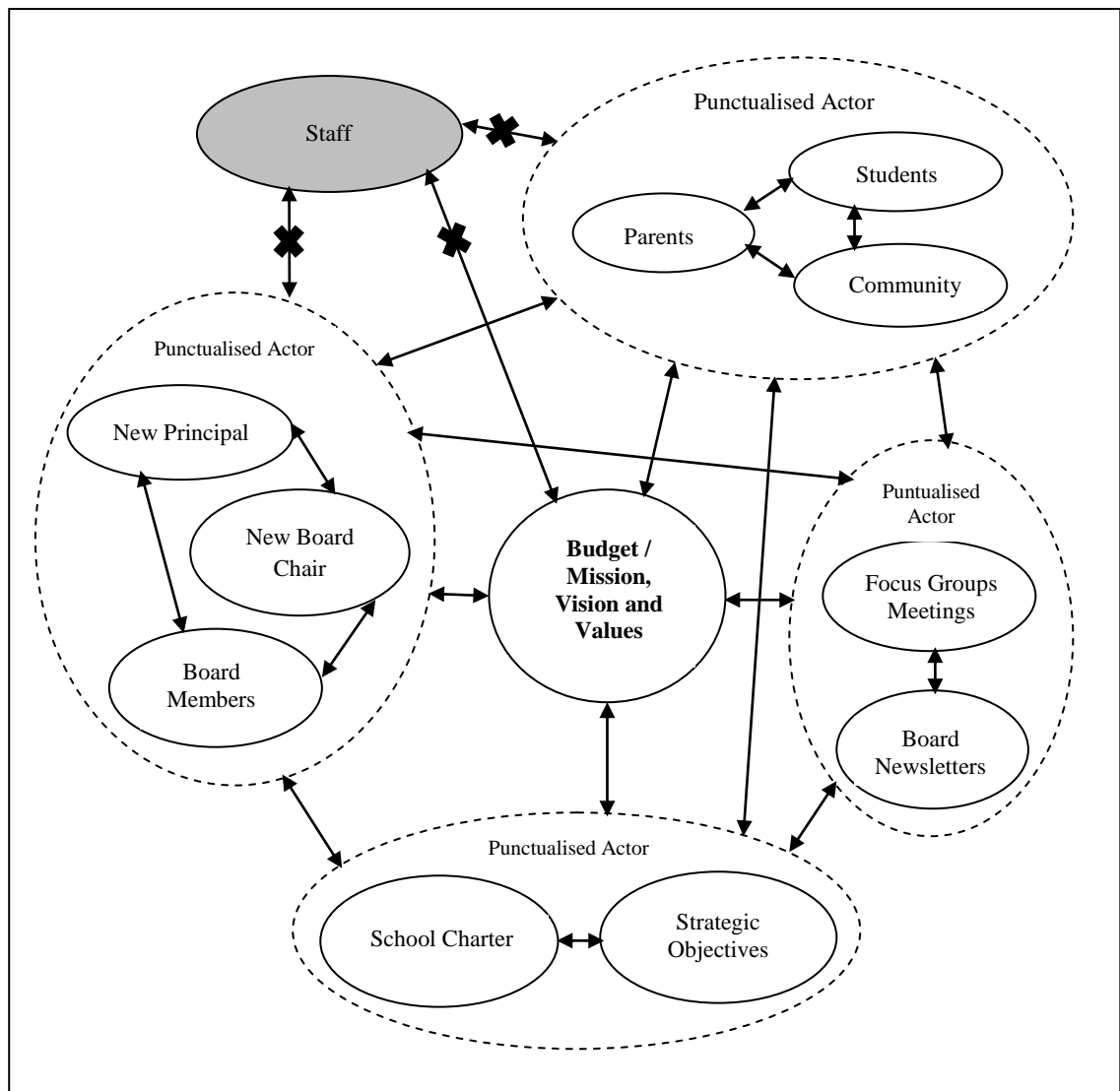
Figure 12. An actor-network theory view of the community engagement partnership network after betrayals

In this way, it revealed the betrayals of the actors in the network; that is, the disassociation of the budget holders from the deficit budget. The power relationships whereby actors were defined and associated were eventually broken (see Figure 12). The old actor-network disintegrated whilst a new actor-network of aligned interests

was developed. Table 19 summaries the issues discussed during the budgetary process at School Robin in terms of ANT-informed interpretation. It was later known that the replacement for the Finance Manager was the person who had enrolled with the new Principal in his old network at another school. The new Principal had started enrolling his allies to form a new actor-network at School Robin.

Table 19. School Robin – Key issues during budgetary process explained by actor-network theory

Period	Issues	Actor-Network Theory Informed Interpretation
Up to 2006	Powerful Principal in the Board	Strong and stable actor-network between Principal and Board kept actors in place
Between 2007 and 2008	Inclusion of budget holders in budget setting process	New allies enrolled to the actor-network made the network stronger and durable; budget was black-boxed
From September 2008 to 2009	Deficit budget	Inscribed deficit budget as a non-human actor; Principal, Finance Manager and deficit budget were punctualised
	Stakeholder Engagement	Expanded the actor-network to parents and wider communities; "mission, vision and values" was an obligatory passage point for actors to pass through
End of 2009	Departure of Principal	Actor-network opened to betrayal; punctualisation of Principal and deficit budget broke
2010 onwards	Start of New Principal	New Principal started; controversies over unsettled deficit budget continued and actors with competing parallel interests were scattered
	Departure of Heads of Department and Finance Manager	Betrayals of Heads of Department and Finance Manager occurred with their departure at the end of the year
	Changing focus of resource allocation	New Principal enrolled actors to form a new actor-network with aligned interest of different goals

6.4.2 In the Context of School Tui

At School Tui, the budget setting process started early in June anticipating that it was given sufficient time for completion. Problematisation began when the budget setting process was kicked off as a school-wide exercise. The level of budget

participation was considered active. Apart from the Heads of Department/Faculty who were responsible for their budgetary areas, other staff members working in these areas were also involved in budget setting. Examples were those classroom teachers who were close to the students and knew the students' needs most. The inputs from the Heads of Department/Faculty and classroom teachers in budget application were widely consulted and taken into consideration.

The successful interessement was demonstrated by on-going discussions and negotiations between the senior management and the budget holders in order to arrive at a budget level that could balance the needs from different learning areas. It was the actors' practices which followed trials of strength. The budget holders arranged meetings with the Principal and the Finance Manager to defend their budget request with reasons. The Principal and the Finance Manager were allies and the spokespersons of the budget. These punctualised actors were the representativity of the network that constructed the translation. The Principal and the Finance Manager enrolled the budget holders and made the budget holders believe that their claims were the solutions to the budget holders' questions. The claims were proved to be effective and there was little controversy.

Closely linked with interessement, enrolment was expressed by collaboration and mutual agreement about the terms and conditions of the set budget. The success of enrolment could be explained by the presence of two factors: an incentive programme and effective authority delegation. Firstly, the Finance Manager made a promise to the budget holders that additional financial resources would be allocated to budgetary areas when the actual income exceeded the budget; and this promise was seen realised over the previous years.

> *Fifty percent [of additional income] will go to a waiting list of budget items that they have asked for before and we said no to them. We said we came back to them. Now we have this x dollar…. Please go ahead.* (Finance Manager of School Tui)

The increase in the number of fee-paying international students who attended the school mainly contributed to this additional income. This outcome was eventuated simply through a conservative forecast built in the budget. This supplement provided

additional finances to support high quality learning infrastructure which was over and above the national education requirements. Through this incentive programme, the middle managers were confident that the interests of their responsible learning area would be advanced. It also ensured the Board that more than a core basic education programme was provided to students.

> *We aspire to deliver more than a core basic education and for that reason we're one of the highest performing schools in the country. It's because we don't just do the basics. Co-curricular spending, co-curricular activity is a very important part of what differentiates our school. We perform very well on getting every student to participate in some co-curricular activity, whether it be sports, arts, as long as they they're doing something and that requires money.* (Board Chair of School Tui)

Secondly, the delegating authority within the management team was effectively exercised. The senior management and the middle managers could assume their power to influence the budget decisions to some extent. Their inputs were sought and heard. They were always involved in the process of strategic decision making. Authority delegation was respected in such a way that it made the interests and actions of the staff converge.

> *[Management staff] were well involved; it gives people ownership of their area…. We got people looking at going for senior management jobs and wanting to progress. So they need that responsibility.* (Principal of School Tui)

Mobilisation took place by the presence of both an incentive programme and effective authority delegation which created motivations for the actors to align their individual interests with the school's financial goals and which established strong links between actors. The budget setting process was steady and the budgetary targets were achieved. This consensus and alliance confirmed the representativity of the network (i.e. the Principal) and, hence stabilised the network.

The actor-network so formed did not stop there. Inside the school, the Principal was heavily involved in staff meetings and school functions relating to both curricular and co-curricular activities. Outside the school campus, he was seen present in various sports events and promotional activities that were captured in the school

magazines and local newspapers. In this way, the Principal's extensive exposure had established himself as an advocate for the close relations with the students, parents and the communities. His monthly report to the Board included not only the progress of the school performance but also his views on the quality of education. His passion for education had exhibited as a succinct manifesto to his management team, the Board, students, parents and the communities. The Principal of School Tui was the focal actor who could satisfy the needs of individual interests inside and outside of the school.

With regard to financial management best practices, the use of an external consultant in addition to the Finance Manager seemed to be a discernible trend towards greater evidence of board governance through the inclusion of a variety of actors, both internal and external. This translation process enlisted the support of the Ministry of Education. This alliance made the budget "an enabler" (Stanforth, 2006, p. 53) of connection between heterogeneous actors that were working collectively towards the school's strategic goals. Likewise, the Heads of Department/Faculty, acting as budget holders, performed with efforts to align their individual interests with the school-wide budget targets.

The connection between the Board, the community, the Ministry of Education, the Principal, the Finance Manager, the senior management and the middle managers formed network patterns that were widely performed and punctualised (Law, 1992). As far as the budget setting process was concerned, it was the network between the senior management and the middle managers that constructed its stability when these actors were translated to pass through an obligatory point of passage. As a result, it came to a point that a range of actors were brought together to support interdependent relations between them. This network of relations was rendered durable through the agency of the humans and non-humans, whether it was the budget, the magazine or the consultant.

6.4.3 In the Context of School Kea

At School Kea problematisation was defined when it was accepted that the school was operating with limited income, and therefore budgetary bids would be vigorously contested. The self-interest of individual budget holders had to be compromised in one way or another. Field trips and overseas trips were no longer funded by the school; they needed to be self-funded by the users.

> *The school roll is falling where the money is short. Where else are we supposed to get it from? It's the realisation that there is just no other option other than to all take a cut. And what I have indicated through the Principal to the senior management and the staff at the school is that the way we are going to ... for everyone to share that burden rather than to disproportionally lump it onto one particular department…. Everyone has to make their contribution.* (Board Chair of School Kea)

The success of interessement was evidenced by the agreement on trimming the 2009 budget by $350,000. The Principal was the focal actor who played a key role in this trimming exercise. Strategies of negotiation and trials of strength were engaged in order to convince the budget holders that budget trimming was the only solution to cope with the tight income base. At the same time competition among budget holders was managed by the focal actor through the strategy of distributive leadership which empowered individuals with shared responsibility and accountability.

> *[Participating in budgeting] is encouraging because people are given responsibility for an amount of money…. The budget holders, once they have set the budget they have consulted with their team, they have done all those things, they have taken the strategic plan into mind, they have got quite a bit of freedom to make decisions within the amount of money that they have got in their budget. As long as they are meeting their goals and doing what they said they were going to do for the year, there's no one breathing down their neck and smacking them over the hand or anything like that so I think it's what we have got going well.* (Principal of School Kea)

The identities of individual actors were redefined and their interests were adjusted and aligned with the strategic objectives of the school. Strong alliance formed between participants through ongoing negotiations, persuasion and adjustments. Budget increase in an area was compensated by a budget cut in another area. This

form of alliance created a network of actors and these actors continually enrolled and mobilised other actors into the network. The focal actor's approach in stakeholder engagement succeeded in settling controversy.

> *The most important thing is to make sure that other people are informed and feel they have had a part in the discussion because the minute you start thinking strategically and planning strategically, and you are not sharing it and you are not going to bring those people along with you, it does make it a bit of a challenge when you know that you are probably the only one thinking in that way in the school.* (Principal of School Kea)

During the budget setting process, the Principal, acting as the spokesperson, attended staff meetings to displace individual short-term goals and interests and align those interests to the school's annual targets. The Principal became the most active advocate of the budgeting system with a strong tie with the Board Chair and the Finance Manager, who both were equipped with the accounting skills and knowledge. The Principal's aim was to translate these actors into the network in order to enrol more actors making the network stabilised. The Principal adopted an open-door policy that encouraged open communication, feedback and discussion about any matters at school. The open-door policy enabled the Principal to translate and mobilise actors into an effective problem-solving network that addressed the problem of the tight budget.

> *I listen to what people say and I am open to everyone's different version of a situation; and I try to be fair on what decisions I make. I try to be transparent in all I do; so I suppose it's sort of a mixture of all those things help to keep the school together running in a reasonable sort of fashion.* (Principal of School Kea)

The recruitment of an external consultant for financial reporting was a further assurance to the actors that the Board was committed to good financial management and budgetary controls that were widely applied to school. The consultant provided a higher level of representational faithfulness on the budget and an independent view on the school's budgetary controls. This, in turn, convinced the budget holders that budgetary control would best serve their interests in a way that their accountability could be satisfied.

Controversies over budget cuts were unavoidable and these controversies were closed when the spokesperson (the Principal) was believed to be beyond question and always had a solution to the problem. The Principal persuaded the budget holders that budget cuts were in the school's interests that all stakeholders were concerned about. This created an obligatory point of passage that was a node of the network in which actants of diverse interests would have to go through. And finally, "an agreement is found through mutual concessions" (Callon, 1986, p. 213) – budget holders collaborated and agreed on the budget cuts; the Principal succeeded in meeting the Board's budgetary targets; and the school was financially sustainable.

6.4.4 In the Context of Fairfield College

Along the theme of actor-network, the obligatory passage point in Fairfield College was worth examination. For a period, the school management style and persuasion skills were stable keeping all the actors in place. This condition, however, overturned when the new Principal came to the school in 2007. Problematisation took place when the Principal identified a solution to improving the student achievement. Unfortunately, the Principal's new initiatives were carried out in an arbitrary direction that allowed for resistance to these initiatives. Interessement was a failure as the Principal exposed her identity as a controlling actor that was not associated with other actors. It seemed that she protected her strategies so well that she failed to interest other potential allies, or she was not able to interest other actors that would support her initiatives. The staff, students and community members acting as opponents were characterised by "ambiguous associations, multiple identities and ambivalent discourse" (Singleton & Michael, 1993, p. 258). These "counteractors" (Alcouffe et al., 2008, p. 3) built a network that grew with stronger resistance to the Principal's initiatives.

The new initiatives proposed by the Principal lacked the obligatory passage point. They lacked the power of spokesperson and the enrolment of non-human actors to convince others of their solution. Worse still, the Principal remained adamant about her initiatives that made the enrolment of potential allies impossible. The network supporting the Principal did not expand, whilst the network of counteractors became

powerful enough to create controversies and challenges. These controversies resulted in the lack of communication and consultation that made the division between the school management and the local community wider and deeper. The Principal's management style did not change and even perpetuated in her dealings with student discipline and staff performance management where grievance and complaints arose. In the absence of the capability to enrol actors, these counteractors continued to resist changes.

To make it worse, the interests that were defined for the new initiatives were not clearly inscribed in any durable materials such as a mission statement or strategic directives. This deficiency eventually caused the network to be open to betrayal – two respected and long-serving deputy principals retired.

The four stages of the translation process are interrelated; controlling by one actor alone is not sufficient for the success of any new programmes. Indeed, enrolment is the key factor when considering successful organisational change. The primary principle is that "the machine will work when all the relevant people are convinced" (Latour, 1987, p. 10). The notion of power relations between actors is important; considering actors one by one is not beneficial to diffuse organisational changes. The success of organisational transformation requires the actors' efforts in interest inscription and translation. It is contended that actor-network is characteristic of successful organisational change. Alcouffe et al. (2008, p. 13) describe change as "a drift of practices that move in time and space along the interactions of a multitude of actors." It is the actors of the network that construct the changes and bring them to life. In Fairfield College, the obligatory passage point had never been created.

6.4.5   Determinants of an Obligatory Passage Point

Up to this point, the creation of an obligatory passage point in the school context has been examined. Figure 13 demonstrates the problematisation in which participants attempt to align their own interests with the organisational objectives during the budgetary process. The success for the entities to pass through the obligatory passage point requires "an intense activity of enrolling, convincing and enlisting"

(Stanforth, 2006, p. 51). The obligatory passage point is a situation in which the focal actor controls other actors who are obliged to remain faithful to their alliances (Callon, 1986).

Within the three schools under study, participative budgeting was employed and the process was documented in the policies and procedures. However, they exhibited different outcomes of the budgetary process concerning the obligatory passage point. Through the study of the budgetary process in different schools, it attempts to identify the determinants of an obligatory passage point.

The creation of a durable actor-network requires a focal actor who is inspirational, intentional and persuasive. The new Board Chair of School Robin had a strong belief in student achievement which relied on stakeholder participation. He continually engaged groups of stakeholders to convince them that the future direction of School Robin was in the hands of stakeholders as long as they were working together in alliances. The stakeholders' ideas were embodied in the artefacts of "mission, vision and values" in such a way that they were firmly locked into a pattern of action. In doing so, the actor-network was stable as the actors were holding each other in the positions assigned to them (Mahring et al., 2004). In School Kea, a stable actor-network helped in carrying out effective authority delegation that empowered management with shared responsibility and accountability. In School Tui, in order to achieve stability of the actor-network for an extended time period, it requires an incentive programme, tangible or intangible, to maintain the controller–controlled power relations. Table 20 summarises these determinants of an obligatory passage point, which are vital if the budget is to be seen as a "black box". It should be noted the determinants are listed randomly with no particular order of importance.

Entities:

The Board
The Principal
Deputy Principals
Finance Manager

Heads of Department
Heads of Faculty

Budget and
Accounting
Technologies

Variance
Reports
Policies and
Procedures

Short-term
interests

Non-
compliance

Lack of
communication

O P P: Budget

Goals of
Entities

Achieving annual
targets as stipulated
in school charter

Delivering
curriculum and
managing financial
resources

Allocating
financial
resources
within school

Providing
guidelines for
budgetary
process

Figure 13. Problems with the budgetary process

Source: Adapted from Callon (1986, p. 215)

Table 20. The determinants of an obligatory passage point in the budgetary process

Determinants of an Obligatory Passage Point in the Budgetary Process
1. The ability of the focal actor to enrol and persuade other actors of the indispensability of the focal actor's interest
2. The engagement of stakeholder participation
3. The effectiveness of authority delegation
4. The sharing of responsibility and accountability
5. The stability or irreversibility of the actor-network
6. The inscription in durable materials
7. The presence of an incentive in the alignment of multiple interests

6.5   Conclusion

This chapter has provided evidence in how a budget creates an actor-network during the budgetary process at schools and how it finally becomes a black box without controversies. During the budget construction, the Heads of Department/Faculty aligned their self-interest with the school's strategic goals through negotiations and mediations with the Principal and the Finance Manager. Engaged in continuous dialogue, the Principal and the Finance Manager enrolled the budget holders successfully. Also, it has described the inscription of the budget by the use of accounting technologies. A budget is a product of accounting technologies. The process of inscription enables the budget, acting as an intermediary to communicate between budgeters and budgetees. The budget cannot exist in its own right; it needs actors to act on it. It requires the Finance Manager who possesses the accounting knowledge to interpret the budget; it requires the policies and procedures to legitimise the actions exercised by the budgeters; it requires the presentation of budget variance reports to monitor the budgetees' performance; and also it requires the efforts of the budgetees to translate the budgeting. These human and non-human actors were interrelated to establish an actor-network and they were convinced that only the focal actor could provide a solution to achieving annual targets.

The transformation of an actor-network is described as the process of translation. The four stages of translation are problematisation, interessement, enrolment and mobilisation. Problematisation began when budget construction and the roles of participants were decided. Interessement involved negotiation with the Heads of Department/Faculty who had accepted participation in the budgetary process. Enrolment included a set of strategies to convince the budget holders to align their individual interests to the school's strategic objectives. To keep the budget holders faithful to the interests of the school, mobilisation continued involving the establishment of enrolled actors embodied in the actor-network. The process of translation holds together the many actors in the actor-network; all actors must pass through the obligatory passage point where actor interests are aligned. This makes the focal actor become indispensable and powerful. At this stage, the budget is said to be black-boxed. Black-boxing occurs when the budget is beyond questioning and

widely accepted by the users. The black box remains sealed until controversies and challenges arise.

The formation of an obligatory passage point was illustrated in different schools. In School Robin, the creation of an obligatory passage point failed during the budget cycle for 2010 when betrayals occurred as a result of disharmony among budget holders contesting for school resources. School Robin contrasted its failure of enrolment with its success in stakeholder engagement linking diverse stakeholders to restructure the school's mission, vision and values which provided the school's direction. In School Tui, the incentive programme [31] and the effective authority delegation[32] contributed to the success of an obligatory passage point. In School Kea, the presence of shared responsibility and accountability made the actor-network remain stable; hence the obligatory point of passage was established. On the other hand, in Fairfield College, the lack of actor enrolment and inscription of durable materials such as strategic directives led to controversies and made the obligatory passage point impossible to occur. From there, a number of determinants of an obligatory passage point were discussed. The next chapter continues to provide a reflection of actor-network practices in relation to power relations.

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[31] See section 5.3.6 Management Style.
[32] See section 5.3.6 Management Style.

CHAPTER SEVEN

REFLECTION OF ACTOR-NETWORK PRACTICES

7.1 Introduction

The aim of this chapter is to provide insights into the actor-network practices in power relations and to address the research questions. Firstly, power relations in the presence of centralised control through decentralisation of responsibility under the *Tomorrow's Schools* policy are examined. Secondly, it attempts to describe how the stability of actor-network becomes challenged and the black box begins to open. Thirdly, it covers discussion about the budgetary process as a means of actor-network through examining the interrelationship between human actors and accounting technologies in the school context. A critical review of the benefits and the potential problems of stakeholder participation in school governance is then offered. Finally, the chapter is concluded by five lessons learned from the cases that have been studied.

7.2 Budgeting and Power Relations

Covaleski and Dirsmith (1986) argue that budgeting serves to represent vested interest in political bargaining processes and maintain existing power relationships. In other words, the authority of allocating resources internalises the empowerment and legitimacy of actions taken by the controller. The control-oriented aspects of budgeting have been manifested in the school context where the Principal is empowered to control the school resources and influence the participants' behaviours. Confrontation between budgeters and budgetees inevitably exists in the budgetary practices. The Principal would use the budget as an instrument of negotiation with the subordinates and as a change agent to re-define the human behaviours. This creates a network of power relations whereby the focal actor (the Principal) employs the most powerful actors, for example the Board Chair and the Finance Manager, for maintaining his or her power and authority. This has been

evident in the practices of issuing warnings by the Principal and the Finance Manager to the budget holders who overspent, and this information also passed onto the Board to gain their support. This form of power relations might hinder the flow of dialogues, bottom-up or top-down, when a powerful principal dominates a school board, or vice versa. The following sections attempt to explain how a dominating principal could exercise control over resources and information, and what consequences may result.

7.2.1 Centralised Control through Decentralisation of Responsibility

Under the ideology of *Tomorrow's Schools*, the administration is decentralised to the school; the school is governed by the Board of Trustees. The Board may delegate its functions or powers to the Principal pursuant to section 66, Education Act 1989. In this way, the Principal is empowered to run the school from day-to-day operating activities to strategic directives. With regards to day-to-day operation, the Principal devolves part of his or her responsibilities to the senior and middle managers who are dependent on the policies and procedures to guide their actions. It could be said that decentralisation of responsibility is operating in the presence of centralised control through the Principal to a certain extent, if not completely.

To understand the power of the Principal, it is essential to study in detail the various complex networks. This entails an analysis of all the stakeholders including the parents, the students, the community, staff members, the Principal, the Board and the Ministry of Education, as well as the interests, goals, and relations that link these actors together. All these actors form a complex heterogeneous infrastructure that shapes the way in which the school is operated.

The Principal, as the Chief Executive takes complete responsibility for leading a school and answering to the Board. The concept of the role of the Principal could be expounded as "information filter", designed to inform the Board of the strategic initiatives or proposals so that the Principal has significant influence over the Board's decision making. As the Principal of School Robin suggested, a trusting and supportive work relationship should be established between the Principal and the

Board Chair. While board meetings generally involve open discussion of issues, the Principal often receives full support from the Board Chair and the other members would follow suit. The board members tend to exhibit a strong sense of commitment to the school and put their faith in the trusting relationship with the Principal. The Principal would become the spokesperson of this heterogeneous network that empowers him or her to exercise control over the actors in the network. The issues arising from the relationship established between the Board and the Principal could be twofold.

First, the Board has a central point of information channel through the Principal who would select the relevant information to pass onto the board members. This practice would make the Board efficient in carrying out their governance role through a central source of information. In this way, the Principal, as a focal actor, defines the obligatory passage point through which the other actors must pass through and by which the focal actor becomes indispensable to the other actors. In School Robin a verbal report to the Board by the Principal was accepted and this verbal report was wholly relied upon by the Board to make decisions. When approval was required urgently, email communication among board members was accepted and finalised as a resolution process. This work practice reflected that the approach of the board members interacting with the Principal was supportive but passive. Because of time constraints, the board members had no opportunities for open discussion, issue identification and finding alternatives. Whether the decision was made in line with the strategic objectives depended on the sufficiency of information provided by the Principal.

> *Well ideally it's an active working relationship [between the Board and the Principal], so where the Board has confidence with the Principal and the management team. The Principal and the management team do achieve what is best for the school. The Board isn't overly dominant in the way things should be; certainly they have opinions and certainly they should be reported to appropriately, but nor should they enforce their will to the exclusion of all other wills.* (Ex-Deputy Principal B)

Second, the Principal collates all the information from various sources and may filter it in a fashion that would maintain his or her power over the subordinates. Instances of dysfunctional behaviours between staff could be concealed and such issues which

may challenge the Principal could never reach the Board. Hence, the Principal would have the opportunity to pre-empt strategic and policy deliberations which might appeal to the Board but not to the stakeholders at large. For instance, budget cuts to those extra "nice to have" items might be in favour of the Board but at the expense of the student's need. In the absence of details about the day-to-day management of the school, the Board tends to be reliant upon the reporting regime through the Principal. This could make the school vulnerable to challenges and controversies from the staff, parents, students, the communities and other concerned stakeholders when their interests are excluded or are never heard. These challenges may question the relations between the Principal and the Board. The scandals at Cambridge High School and Fairfield College are two typical examples of the consequences derived from a dominating principal.

7.2.2 Challenging the Stability of Power Relations

The power of the Principal at schools is neither uniform nor stable, but ambivalently changing with actors coming in and going out of the network. The power of the Principal could be strengthened by enrolling and mobilising a trusting partnership relationship with the Board Chair.

> *The key element to making it work is the Board Chair and Principal partnership…. Schools I know that work successfully are where the Principal and Board Chair have a good relationship and there is trust. There is trust and support when you need it.* (exiting Principal of School Robin)

However, too much trust put in the Principal could threaten the school governance and dampen the integrity of the school management. Too much trust in one person has the potential to result in private interest and unethical behaviours. The failure of the Board's governance in Cambridge High School was typical of the abusive use of trust by the Principal who was charismatic and controlling. She dominated the strategic decisions by manipulating the 100 percent pass rate in NCEA, transforming the school library into a cyber café, and having a conflict of interest in dealing with a private company. These allegations have tarnished the probity in the public sector and the faith the parents put in the Board of Trustees. The Board of Trustees is the

legitimated body to govern the school management, and the parents rely on these trustees to do the job. The trustees are not meant to run schools, but they should be able to identify inappropriate practices and take actions to rectify them. Inappropriate practices could be identified through communication with the staff, students, parents and the wider communities. Considering the ethical dimensions of conflicts of interest is also part of the Board's public duties.

The episode at Cambridge High School revealed the information asymmetries between the Board and the Principal so that the powerful actor (the Principal) could control the Board. The network built between the Board and the Principal had been instrumental in obtaining personal gain in favour of the Principal. The Principal had more knowledge about day-to-day school management and succeeded in gaining trust from the Board. This trusting relationship enabled her to orchestrate financial gain in association with her private business. Indeed, given the long-standing trusting relationship, the Board relied upon the information supplied by the Principal. The Board failed to carry out due diligence in identifying any conflict of interest by virtue of the Principal's association with her own private business. The Board's trust in the powerful Principal constrained the Board's impartiality and transparency in managing any conflict of interests. This very means of control by the Principal eventually stirred up controversies because the Board failed to engage other actors who also had a stake in the school management, such as staff, students and parents. These actors are equally important to school control and management in achieving national education goals. The Board should enrol more allies who would assist in ensuring every individual behaves in a way that the integrity of the public sector is always maintained. These allies in the network of relationships could bring about order and control. It is for this reason that the sustainability of power relations requires enrolment of many actors whose interests and goals are linked to the public interest.

7.2.3   The Leaking Black Box

Cambridge High School and Fairfield College are instances to illustrate the consequences of non-enrolment of actors. The lack of a spokesperson in the network

disabled the interessement and mobilisation. The interests of all stakeholders could not be aligned, and therefore alliances could not be formed. It is contended that all actors are equally important and only voices speaking in unison could be heard (Callon, 1986). What would bring individual actors together to fall into a relational network that is participative, resilient and enduring? They are the displacements, transformations, negotiations, adjustments and concessions that are collectively called, in Callon's term, "translation".

When the actor-network is maintained and stabilised, it is said to be black-boxed. However, the irreversibility or stability of the actor-network could be challenged when a new actor joins or an existing actor exits the network. The alliance is contested and translation becomes betrayal and controversy. The network falls apart and the constituent parts of the network struggle to pursue their individual goals separately. The black box is opened and leaking. This makes the process of translation difficult as the new actor has already been included in other networks that might have aligned the new actor for different goals. Divergence of the actors, therefore, occurs as the constituent elements of the existing network make changes through recruitment by competing networks. In the case of School Robin, as soon as the new Board Chair was recruited, individual interests started diverging. Gradually, the Principal, who was the spokesperson of the existing network, lost his identity and could not perform his role. The role of the spokesperson was later re-defined, created and shaped by the newly emerged network. The existing network eventually broke down and a new network in alliance with the new Board Chair was formed. This dramatic change was reflected in the Board of Trustees who gradually transformed from a reactive role of "sanction" to proactively "initiating" new strategies and policies. It could be said that the focal actor was shifted from the Principal to the new Board Chair who succeed in enrolling actors. The new actor-network so formed, however, did not stop there. Controversies from the actors continued when there was a change of focal actor.

In another example of dysfunction in School Robin, betrayals occurred when the budget cuts were initiated by the Acting Principal in 2010. The actors challenged the focal actor's actions. The budget holders proposed a "counter-budget" to the Acting Principal to express their resentment and anger. Although the controversy was

settled, it was an unstable reality of its own. It was re-ignited when the new Principal entered the network and attempted to compete with parallel interests. Unfortunately, he lacked the power of a spokesperson to convince the actors of the ideals of his solution. Acting alone, it was hard for the new Principal to draw diverse actors together, not to mention forming an actor-network. Consequently, the budget was not a binding document; it failed to discipline those actors who failed to perform. In this way, the new Principal failed to enrol and control those actors who were responsible for managing the budget. To make it worse, the leaving of the spokesperson of the budget – the Finance Manager – was a challenge to the representativity of the actor-network. This made the black box reopen and leak.

The Principal, a member of the wider community and an actor in the network, could not act individually. Drawing on Latour's (1986) term of "the powers of association", the effects of the Principal's actions may be described as the result of others' actions – if successful, a network of aligned actors having joined forces in alliances is formed; if unsuccessful, a scattering of actors with diverse individual interests is experienced. The resignation of School Robin's Principal was a consequence of the broken network when a new actor joined the network and the interest of the network became controversial. The entry of new actors, abandonment of existing actors or changes in focal actor could cause the network to be broken or dysfunctional. For organisational changes to successfully diffuse, it is necessary to have support by a variety of actors being enrolled to the network. The more diverse the actors are interrelated, the more complex a network becomes. A complex network requires stronger stability to keep actors in place. School Robin's Community Engagement Partnership Project highlights the success in stakeholder enrolment by the focal actor. Contrastingly, the broken actor-network was the consequence of the failure of stakeholder engagement by School Robin's new Principal.

The cases studied here have provided evidence of the complex inter-relationships between the Principal and the Board which make up organisational life in the school context. The manner by which information is controlled and the nature of information that assists in decision making form alliances of potentially powerful networks. These networks play a significant role in determining what constitutes the organisational reality as a consequence of translations within the networks.

Discussion about centralised or decentralised control is irrelevant when heterogeneous elements in the network are acting together to create power and authority, hence stability.

7.3   Budgeting as a Means of Actor-network

It has been discussed that budgeting could be used as a political tool for control to maintain the controller's power. From a different vantage point, budgeting could be viewed as a means of connecting individuals of diverse interests through the formation of an actor-network. In an organisation like a school, it is reliant on the use of accounting technologies to monitor and regulate human activities. In ANT terms, a budget, after it has been formalised, may be best seen as a "black box". But the behaviours of organisational actors influence the way in which a budget is black-boxed. The persons who hold the power and/or accounting knowledge are able to exert influence on the effect of their actions during the budgetary process. To evaluate the performance of their budgetary areas, the middle managers rely on the information generated from the accounting technology which is controlled by the Principal and the Finance Manager. Intentionally, the budget, as a black box, ensures the organisational performance can be measured against it and the budget holders are held accountable for their performance. This specific role of a budget confirms Beddingfield's (1969) and Milani's (1975) argument that the budget itself acts as an instrument to converge disparities between the controller–controlled relationship. The success of convergence depends on the level of human interrelations which involves active participation, programme integration, coordinated operation and incentive initiatives.

The education reforms – devolution of school management, advocacy of effectiveness and efficiencies, performance accountability and involvement of community in formulating educational strategies all contributed to the emergence of an interest in school budgeting. The asymmetries in accounting knowledge among management team members have defined budgeting as a platform where negotiation, contest, resistance and compromise occur. The emergence of a school budget is conditioned by the management's attitudes towards resource allocation, financial

strategy and educational targets. The fabrication of budgeting in schools is shaped by the participating actors who include the Board, the Principal, the Finance Manager and the Heads of Department/Faculty. It is naïve to assume that a set budget would make the desired outcome happen. The desired outcome is represented by the interpretations and responses of all the participants. Thus Preston, Cooper, and Coombs (1992, p. 577) support the idea that, "The fate of the technology depends on others' behaviour…. Power may be at its most effective when there is no conflict or resistance." All in all, a budget takes on its multiple roles, one of which is relating, connecting and associating actors to fulfil the organisational objectives.

7.4 Stakeholder Participation in School Governance

The budget creates an actor-network where power relations are maintained as long as individual interests are aligned. The power relations of this actor-network become stronger when the size and complexity of the network grows. Paradoxically, the stability of the actor-network is under constant challenge when new actors enter the network or existing actors leave the network. To maintain its continued existence, the network requires a successful programme which is capable of enticing interests and inducing stakeholders to take collective action. The components of this programme should include stakeholder participation to a level that suits the prevailing circumstance. Figure 14 exhibits a consultation continuum in which the level of participation ranges from *information* to *control*.
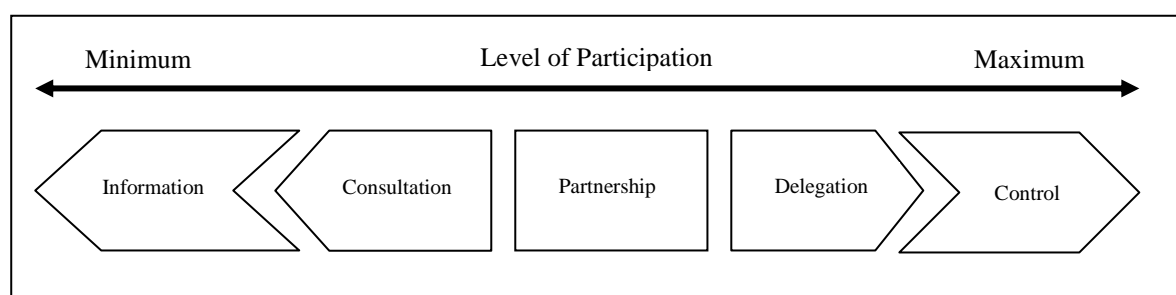
Figure 14. A consultation continuum

Source: Bridgman and Davis (2004, p. 81)

The consultation options range from a one-way transfer of information to stakeholders to handover of the decision-making power to stakeholders. In the school context, examples of one-way information include newsletters, school magazines and annual reports. Consultation seeks inputs from stakeholders and the decision outcome remains in the hand of the decision maker. Partnership is a two-way communication process whereby stakeholders have a say and cooperate with the organisation. And their inputs help shape the policies and initiatives. Delegation transfers the decision making to the external stakeholders. Control is the handover of vested control to the stakeholder at large. Table 21 lists the consultation objectives and instruments which are commonly used in the process of policy formulation.

Table 21. Consultation objectives and instruments

Information	Consultation	Partnership	Delegation	Control
• surveys	• key contacts	• advisory committee	• public inquiries	• referenda
• focus groups	• interest group meetings	• policy	• impact assessment studies	• privatisation
• public information campaigns	• town hall meetings		• communities	
	• circulation of proposals			
	• public hearings			

Source: Bridgman and Davis (2004, p. 83)

Participation is always accepted as a strong and sensible foundation whereby stakeholders have both a say and a stake in demand-driven programmes (Gershberg, 1999). In the school sector, the level of stakeholder participation is limited to consultation; schools are unlikely to seek stakeholder participation beyond partnership. However, it is desirable that both consultation and partnership should involve practices and techniques that enable knowledge exchange, access to expertise and public accountability (Riege & Lindsay, 2006). Correspondingly, it is useful to examine the benefits and the potential problems of stakeholder participation in the context of school governance.

7.4.1 Benefits of Stakeholder Participation

At first, it is necessary to define *participation* and *involvement* discussed in this section. *Participation* implies a strong and active role on the part of parents and other stakeholders; whereas *involvement* connotes passive collaboration and mere consultation (Gershberg, 1999). Participation by stakeholders means more than consultation and includes empowerment that some level of autonomy and self-determination is exercised.

New Zealand has a long history of parental involvement in schools, particularly in supporting teaching work by assisting reading programmes, accompanying classes on school trips, and organising fundraising activities (Baker, 2002). Before the education reforms, the parental involvement was limited only to support and assistance parameters which were passive roles in educational initiatives. The Picot Report (Taskforce to Review Education Administration, 1988) identified that parents wanted to have influence on the education system.

As reviewed in Chapter Two, one of the aims of *Tomorrow's Schools* is to gain parental and community engagement in education. This form of partnership is intended to improve responsiveness to local conditions and needs which are in line with the Government's national education goals. The recipients of public education are the children, and the parents are the consumers who make the decision choices. This has developed a competitive culture in the school sector. Schools are, therefore, operating under pressures to gain the parental choice. The three-year cycle inspection by the Education Review Office exerts additional pressure on schools. The Education Review Office reports are published and accessible to parents through its website[33]. The report gives an account of the school's compliance with legal requirements and the school's achievement on educational outcomes. The report is intended to inform parents and communities of the performance of the school; and this information may be used by parents for making their choice. The Education Review Office report is, therefore, perceived to shape the perception of the school and the school's ability to attract parents to send their children there.

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[33] www.ero.govt.nz

The central feature of *Tomorrow's Schools* is the transfer of operational responsibility to the Board of Trustees whose members are mainly the parent representatives. The Principal also takes an important role representing the school management in the Board. The Education Act 1989 empowers the Board to govern the school, and therefore the Board is held accountable for the school performance. It has been mentioned that the schools are expected to be responsive to the local conditions and needs, and the demand for local conditions and needs comes from the students, parents and community groups. The Board and the Principal should engage themselves at the school and in the community listening to the voices both inside and outside the school campus.

> *[The Board] has got to be more holistic about [stakeholder engagement] really, and they've got to stay in touch with the stakeholders. They've got to stay in touch with the staff; they've got to stay in touch with the students and they've got to stay in touch with the community…. They make things happen. They make it happen by a process of negotiation and persuasion.* (Ex-Deputy Principal A)

The Board, senior management, teachers, staff, parents, students and community members are expected to work together to make the school a better place for learning. Teachers are sharing experiences and ideas with the colleagues. The Board and the Principal listen to the concerns of issues, seek feedback from stakeholders, and work with them to develop a workable solution. Students actively project the school's profile onto the community through school functions and events. Parents are engaged in their children's educational programmes. Community groups support schools through monetary (e.g. sponsorships) and/or non-monetary resources (e.g. voluntary work). To make a school's vision come true, the Principal should take a strong leadership role to pull all individual stakeholders together and make them collectively responsible for envisioning and implementing educational initiatives.

Internal consultation with staff members is essential as they are the immediate members affected by an issue and are close to the students and parents. External consultation beyond the school's campus is equally important. Parents, students and community members provide important and relevant perspectives that are beneficial to implement school initiatives. They can offer a unique and valuable pool of knowledge available to the school. Relationships with these diverse community

groups should be nurtured through regular dialogue and shared responsibility. School Robin invited students, staff, parents and representatives from local businesses and community groups to participate in formulating school directions. In doing so, ownership and commitment by all stakeholders is a motivation to realise the school charter, mission, vision and values.

School leadership should be a broad-based concept so that all stakeholders are collectively responsible for leading in a shared purpose of a community. This concept enables the stakeholders to take the ownership of educational initiatives in schools where the future generation is nurtured. It would be a challenge for schools which are operating within the parental and community values while preparing the students to meet the needs of the future. Conflicting values and expectations are unavoidable between stakeholders. The school management may focus on academic achievement, whilst the parents value cultural activities. This expectation gap could be narrowed by active participation, trusting relationships, and collaboration among stakeholders in two-way communication.

Schools are individualised under the decile-rating system by which the local community has been classified with a designated socio-economic status ranking from 1 to 10. Each community has its unique characteristics and is composed of families who always support their community in one way or another. Through consultation and partnership, views from different perspectives are collated by the school to develop the strategic direction that encompasses the vision and the community values – improving social and academic outcomes for all students. At the heart of actor-network relationships that comprise the school and the community, there is a strong and positive culture of trust, collaboration and responsibility. Mutual trust among stakeholders is built through active participation, wide consultation and discussion forum. The mechanism of *Tomorrow's Schools* has fuelled schools to operate in the competitive market in which parents exercise parental choice. To be successful in the market place, schools should engage with a range of stakeholders including staff, parents, students and wider communities in an ongoing dialogue about all matters with a view to developing a shared understanding of the school's direction.

7.4.2 Potential Problems of Stakeholder Participation

The benefits of stakeholder participation in decision making at schools have been explored in the previous section. This section discusses the potential problems with stakeholder participation. The discussion focus is mainly from the school management's perspective.

At the outset, the mutual dependent groups – the school Board, the Principal, teachers, students, parents and community members have their own clearly defined goals. The purpose of stakeholder participation is assumed to align these individual goals and bring the school's strategic objectives to fruition. A potential decision dilemma is that despite the parent representatives' voting majority in the Board, the Principal is the true leader of the school to make and implement school policies. The Principal is the direct supervisor of teachers and the decision maker of student discipline and daily operations. The Principal may view himself or herself as an education professional who knows better than the parents and community. If a dysfunction exists in the school governance, competition for leadership will most likely happen between the Board Chair and the Principal. In the worst scenario, the Principal is unwilling to share power and authority with the Board Chair, whereas the Board Chair perceives himself or herself as a counterbalance to the Principal's dominating character.

Competition for leadership was evident in School Robin when the new Board Chair was recruited and initiated the review of the school charter, mission, vision and values. The Principal was no longer able to dominate in the board meetings as before. The new Board Chair started taking control of power over the school governance and management. This had jeopardised the leadership role of the Principal. In effect, the power had been shifted from the Principal to the Board Chair. The existent actor-network broke down and a new network formed with an interest that was aligned with that of the Board Chair. Consequently, the Principal was removed from the network to give way to a new Principal who would lead the Board's strategic directions.

Besides power competition, the Principal could be diverted from achieving the national education objectives to meeting the needs of parents and the local community. Conflicting cultures and value systems between the school and the community may make the interest alignment difficult. For instance, school management may choose to focus on changing pedagogies to raise the level of student engagement, whilst parents would see student achievement in sports as the priority. This disparity may be, to a certain extent, detrimental to the success of stakeholder partnership.

Capabilities, skills and knowledge pertinent to school governance may vary among board members. This will lead to variation in stakeholder expectation that the school needs to reconcile given the multifaceted and complex education policies. Disagreement between board members needs to be addressed and managed at all times in order to keep the board functioning. Management of conflicting cultures and views could upset the current balance of power in schools (Anderson, 1998). The process of reconciliation may be costly to decision making, causing delay in important decisions, and leading to inefficiency and ineffectiveness in school management.

In School Robin, it took almost a year to finish the consultation/partnership process in reviewing the vision, mission and values and formulating the strategic directions. The process had cost the school not only time but also money. A substantial amount of the Principal's work had been occupied by liaising with the stakeholders through activities such as conducting cottage meetings with parents and community groups, collating and analysing feedback, and holding meetings for providing decision outcomes. To make it a success, this process must be continually engaged and monitored.

Stakeholder participation needs to be a two-way communication. The majority of the schools keep the parents and community informed through newsletters and students' progress reports. This is, however, a one-way communication and schools take it for granted that the stakeholders have participated and are consulted. Two-way communication is essential for stakeholders to offer their inputs and schools receive feedback from them. Workshops, seminars, meetings and forums should be

organised on a regular basis to establish mutual trusting relationships between stakeholders.

Quality stakeholder participation requires stakeholders who have a vision for education and strong commitment. Ongoing training and support to the board members should be provided from both the school and the Ministry of Education. This may involve human and financial resources which are additional to the already constrained school budget. The Principal, as the leader of the school, has to weigh up where the resources should be allocated – whether go to the learning resources or direct to the stakeholder engagement. It could be a difficult decision particularly for those schools which are running on a tight budget.

Through election, parents who are interested in education are provided with opportunities to get involved in school governance. Becoming trustees of the school Board, they can access all sorts of information that is restricted from the public. Examples of restricted information include planning for property projects, requests for service provisions and staff recruitment. Cautions are necessarily taken to avoid any conflict of interest while accessing the restricted information for a purpose other than exercising governance duties.

Section 103A of the Education Act 1989 requires a Board to get approval from the Secretary for Education if the total of all payments made in respect of all contracts in which a trustee of a Board or a member of a committee of a Board is concerned or interested exceeds $25,000 in any financial year. The Act further defines that a trustee or a member of a committee of a Board is deemed to be concerned or interested in a contract made by a Board with a company, if the trustee owns 10 percent or more of the issued capital of the company or of any other company controlling that company. Obviously, the Ministry of Education has foreseen the potential risk of personal interests involved when stakeholders participate in school governance. Unfortunately, there is a lack of mechanism to regulate the Board's performance. It all depends on the voluntary disclosure by the Board or the quality of the work done by the auditor appointed by the Auditor General. Disclosures on related party transactions are mandatory in the school annual report. Little has been

known whether related party transactions are fully disclosed or intentionally undisclosed.

The benefits and the potential problems relating to stakeholder participation in decision making for school governance are summarised in Table 22.

Table 22. The benefits and problems of stakeholder participation in decision making for school governance

Benefits	Problems
1. Responsive to local conditions and needs.	1. Increases competition for leadership between Board Chair and Principal.
2. Aligns individual interest to organisational objectives.	2. Diverts Principal's attention from achieving education objectives to meeting the needs of stakeholders.
3. Improves a two-way knowledge transfer.	3. Spends time in reconciling conflicting cultures and views among stakeholders.
4. Develops mutual trust, collaboration and responsibility.	4. Consumes human and financial resources.
5. Promotes effective accountability.	5. Increases the opportunities for conflicts of interest.
6. Minimises competition between schools.	6. Increases demands driven from different stakeholders.
7. Avoids information filtering by one person.	7. Requires two-way communication that is time consuming.

7.5 Reflection of Actor-Network Practices

The previous sections have addressed the research questions involving the three themes identified in Chapter Five: (1) budgeting as a political tool for control, (2) budgeting as a means of actor-network, and (3) stakeholder participation. This section reflects on the ANT application to the cases and examines what could be learned from this study. While the qualitative case study method does not support making definitive assertions based on evaluation of a few cases only, the following important lessons will provide some insights into the kind of interrelations between stakeholders that a leader could have an impact on.

1. The budget setting process constitutes relations of power which are exercised by stakeholders at large, not by the controlling actor alone.

The paradox of power asserted by Latour (1986) underpins the use of a participative budgeting system in organisations. Under the influence of stakeholder participation, expert knowledge of accounting can help mobilise support for budget management (Ezzamel, 1994). A budget is developed through the use of accounting technology which, in turn, is operated by expert knowledge to legitimate a rational economic action. In terms of Michel Foucault's (1980) theory of power-knowledge relations, knowledge relations always implicate power relations (Hoskin & Macve, 1986). Likewise, the budget setting process constitutes relations of power which are exercised by human actors. Foucault's (1980, p. 89) argument resonates with Latour's (1986) powers of association that power is "neither given, nor exchanged, nor recovered, but rather exercised." In other words, "power is not a property or a possession, but a strategy or something exercised, the overall effect of a set of a strategies" (Law, 1986, p. 16). The exercise of power is a means by which certain actions influence others' actions whether present or future. An actor-network is finally formed to realise the power being exercised, and enrol more actors in order to strengthen the network and maintain the power.

Foucault's power/knowledge framework and Callon and Latour's ANT are complementary to each other, particularly in discussing the relations and networks of power during the budget setting process. Foucault's work focuses on power/knowledge relations and disciplinary power in modern institutions. In contrast, Callon and Latour's work on the sociology of translation specifically explains how actors transform opportunities into resources, and resources into networks of power which seek to form alliances, to converge disagreements and to align interests. To maintain power in an organisation or society requires network persistence which is a function of the roles played by all actors in the network. Finally, Latour (1986) suggests that the notion of power should be abandoned. One should study the elements of society that hold people together and that take the form of all the sciences and technologies. Latour (1986, p. 276) summarises his argument in one sentence, "society is not what holds us together, it is what is held together." In

fact, what are held together in a society are human actors and an account of rules and instructions to reduce discretion among a network of actors.

2. *The school context is conceptualised as an open system in which a phenomenon changes over time in relation to its context.*

The subjective–objective continuum discussed in Chapter Three provides an array of basic assumptions within social science. Towards the subjective extremity of the continuum, the ontological assumption about the world relaxes and it recognises that "the social world constitutes some form of open-ended process" (Morgan & Smircich, 1980, p. 498) in which human beings are interacting with their social reality. Morgan and Smircich argue that the adoption of a research method is contingent on the nature of the phenomenon to be studied. The field of this study is set in the school context whereby humans are perceived as actors negotiating with their social reality during the budget setting process. Employing a naturalist or qualitative research approach in this study provides an understanding and explanation of "how social order is fashioned by human beings in ways that are meaningful to them" (Morgan & Smircich, 1980, p. 496). This helps reveal the inner nature of the social world in which humans and non-humans are relative and interacting "for the reduction of discretion and the constitution of power" (Law, 1986, p. 18). The actions of humans affect the forms of non-humans; non-humans, in turn, affect the behaviours of humans. Humans and non-humans are interacting between a complex network of actors as diverse as the Ministry of Education, Board of Trustees, the Principal, Heads of Faculty/Department, Finance Manager, staff, students, parents, the local communities, the budget document, accounting technologies, and policies and procedures. These actor-networks are not stable; rather, they are changing with the coming and exiting of an actor in the pursuit of interest alignment.

The virtues of the techniques and methods engaged in this study are considered appropriate in regard to the nature of the social world, the stance of the researcher, and the research method the researcher chooses to use. The precise nature and significance of the phenomenon at schools is well explained within the context of the assumptions on which the researcher acts. This study supports the advocacy of

qualitative research by Baker and Bettner (1997), Covaleski and Dirsmith (1990), Guthrie and Parker (2004), Holland and Stone (1996), Lee and Humphrey (2006) and Morgan and Smircich (1980) in a way that the nature of the social world could be viewed from diverse perspectives ranging from objectivist to subjectivist. Most importantly, the goal of any research is to improve the knowledge of the phenomenon being studied.

3. *The performance of the Principal should be reviewed regularly and independently.*

Boards of Trustees are the employers of state schools in New Zealand. The Board has all the rights, duties and powers of an ordinary employer under the State Sector Act 1988 and the Education Act 1989. The Board appoints the Principal as the Board's chief executive to control and manage the school. Principal performance management formalises the relationship and accountabilities between the Principal and the Board, which incorporates mutual trust and respect. However, when the work relationship between the Board and the Principal is longstanding, there is likely a tendency to incorporate personal bias and prejudices about the Principal's performance. This will dampen the integrity of the principal performance management system.

To protect the integrity of the Principal's performance appraisal, there should be an element of objectivity which constitutes a regular cycle and an independent appraiser. The appraisal process should be undertaken annually and the appraiser should be someone independent of the Principal and appointed by the Ministry of Education. The appraiser should collect evidence from various sources including interviewing the board members, staff, students and parents, examining documents and undertaking observation. To enhance appraisal independency, the appraiser should not be the same person who provides support to the Principal. Also, the appraiser should be changed regularly (for example, every three years) to maintain the credibility and objectivity of the appraisal.

If you want [principal performance] to be monitored objectively, you've got to get somebody from outside to look at it. Again you have to employ somebody. (Ex-Deputy Principal A)

The Board should review the Principal's performance on a regular basis. It should be a yearly review. In order to do that review, they can either gain information themselves from particular sources, be it from staff or from the community or from the students…. It should provide the balance ideally between listening to their Principal but at the same time reviewing their performance. (Ex-Deputy Principal B)

4. **Stakeholder participation can play a constructive and decisive role in effective school governance, but it is not an end in and of itself and it requires a legislative framework to regulate the conduct of a trustee of a Board or a member of a committee of a Board.**

While including parents and community members in the school governance may help in responding to the local needs, a constructive and participatory mechanism is necessary to regulate the functioning of a board of trustees. No member or a group of members should control or dominate a board, instead collaborative or shared leadership should be fostered at a board meeting. Shared leadership would encourage stakeholder engagement in a way that stakeholders remain active in the decision-making process.

The public would expect a board of trustees who is capable of exercising its empowerment in school governance. Members of a board are expected to act with integrity, unselfishness, and concern for the public interest. Under the current structure of school governance, board members are elected by the local community to represent all stakeholders in the school Board[34]. The members elected could come from all walks of life, so the quality of boards may vary from school to school. Generally speaking, board members may voluntarily take part in school governance.

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[34] Trustees are elected by the parent community, staff members and, in the case of schools with students above Year 9, the students. A standard board of trustees' membership includes: between three and seven parent elected trustees; the principal of the school; one staff elected trustee; one student elected trustee (in schools with students above Year 9); and co-opted trustees. Boards of trustees must hold elections for parent and staff trustees every three years. Elections for student trustees must be held annually in September in schools with students above Year 9.

It is difficult to get the right mix of skills and knowledge in an elected board. Within a board, its members of different backgrounds may have individual interests in accordance with their culture, history and experience. As an effective board, multiple interests need to be aligned with the school's strategic objectives. This requires a framework or mechanism to achieve interest alignment. It is recommended that the Ministry of Education should develop a *Code of Conduct* to regulate the behaviours of the Board of Trustees and ensure the Board quality. The Code of Conduct should stipulate the expectations of trustees and the standards of behaviours and ethics that apply to them. The Code of Conduct should set out fundamental principles and provide guidance on professional conduct needed to sustain public confidence in the school Board. Most essentially, the Code of Conduct must be monitored by the Ministry of Education and is subject to review regularly to meet the changing social and economic environment. Equally important, the performance of board members should be measured against the Code of Conduct regularly by the Ministry of Education.

With the Code of Conduct put in place, the outputs or results (i.e. effectiveness) of a school Board could maintain consistency, despite the inputs (i.e. skills and knowledge of trustees) which vary between schools. Continual support and training provided by the Ministry of Education is necessary to equip the school Board with necessary skills[35] to carry out their governance role in an effective and efficient manner. The Code of Conduct framework for the Board of Trustees in delivering effective school governance is explained below.

5. *A Code of Conduct provides checks and balances in power relations.*

First, it is necessary to distinguish between *power* and *authority*. *Authority* is directing a routine in response to instructions and it has no discretion (Law, 1986, p. 15). Contrastingly, *power* is the capacity to make judgements and exercise choice between options. To maximise power, it is necessary to delegate the assigned role to authorities who must know what is to be done. At the same time, the power knows

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[35] The necessary skills of the Board include understanding the Board's legislative obligations, the difference between governance and management, student learning, performance management, financial literacy, principal appointment and strategic planning.

what the authorities know. Law (1986) describes this social structure as a *distribution of knowledge*.

To put this discourse in the school context, the power relations between the Board Chair and the Principal should be allied to keep the actors in place. Sometimes, the ideology on the school's strategic direction between the Board Chair and the Principal could be different as they come from different disciplines and backgrounds. Even their interpretation of a piece of policy could be different. This disparity could lead to the breakdown of their work relationship, not to mention the actor-network as it has never been established. And this is the root of the problems that are present in those schools that require the Ministry of Education's interventions.[36] To give an example, in School Robin the Board Chair would like to promote the school profile in the eyes of the community, whilst the Principal would prefer to allocate more resources to raise student achievement. Who could win this battle depends on who has the power to influence the rest of the board members. Ideally, no person should be dominant in the boardroom discussion. To balance the power in the boardroom, it is recommended that a Code of Conduct for trustee members should be developed. The following paragraphs explain how the Code of Conduct could improve school governance through interrelations between participants.

Ministry of Education and the Board. Pursuant to the Education Act 1989, the Board of Trustees is empowered to govern and control the management of the school. The Ministry of Education is the governmental authority to oversee the school sector in accordance with the national education goals. Accordingly, the Board has a duty to report to the Ministry of Education on the performance of the school and take accountability for its collective actions.

The Board and the Principal. The Principal has delegated authorities from the Board to manage the school. As a member of the Board and the chief executive of the school, the Principal makes decisions on daily operations and plans the strategic goals. While fulfilling both the governance and management roles, the Board and the Principal should work on a trusting relationship to ensure that they follow the

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[36] For details, refer to Chapter One, section 1.2.2.

Ministry of Education's National Administration Guidelines which set out desirable principles of conduct for schools to achieve the national education objectives. Ideally, the Principal works closely with the Board and they are punctualised as an individual actor in a network. The Ministry regulates the trustees' conduct and also requires the Board to review the Principal's performance regularly.

The Principal and the Management Team. The Principal delegates part of his or her duties to the senior management team. The senior management team members are Associate/Deputy/Assistant Principals and they are registered teachers under the New Zealand Teachers Council. The New Zealand Teachers Council has developed a Code of Ethics for teachers, which sets out the expectation of teachers' conduct.

One of the essential management roles is financial management. Importantly, the person in charge of the school's finance (i.e. the Finance Manager) should possess both financial and accounting knowledge to ensure the school is financially sustainable and accountable for public money. To achieve this role, the Finance Manager's performance should be monitored by a regulatory body through the audit process. The Finance Manger has a range of work relationships with the Principal, the Board, other management team members and the external stakeholders. The Finance Manager's identity exposes himself or herself as an association of heterogeneous elements in the network. This role could easily be transformed into an important skilled actor and becomes an obligatory passage point in any actor-networks. Hence, the Finance Manager's role is paramount to ensure good practices of financial management that complies with legislative requirements.

In the discourse of ANT, the Ministry of Education, the Board, the Principal, the senior management team, the National Administration Guidelines, the Code of Conduct and an audit could be built into an actor-network. When the stability or irreversibility of this actor-network is strong, these actors are kept in place with interest alignment. This will bring the result of effective school governance. When the entry of new actors, abandonment of existing actors or change in alliances occurs, the actors continue to align their individual interests in accordance with the Code of Conduct. The black box of networked actors would stay closed as betrayals and

defeats would not happen. In other words, a Code of Conduct regulates an actor's behaviour to avoid any deviations from the network.

An actor-network framework of effective school governance is configured in Figure 15. Within this framework, each actor is connected with each other in one way or another. Simultaneously, each group of actors is bound by its Code of Conduct or Code of Ethics or a set of regulations which limit the discretion of the authority and thus reduce power maximisation. It is noteworthy that there are two levels of network. The inner level is the actor-network between the Board and the Principal, who are punctualised as a single actor as far as the outer level of network is concerned. This focal actor is important to the network because their position enrols many other actors into the network. If successful, the outer level of the network will grow by aligning more and more actors to a particular purpose. Whilst the size of the actor-network grows, the existing network may likely develop into a divergent direction. If this happens, the non-human actors, such as the Code of Conduct, the National Administration Guidelines or the audit, will act on it by directing the actors back to its original position to maintain the stability of the network. To put it another way, the social relations embedded in the actor-network remain stable as long as the artefacts are used. In ANT terms, the actor-network is irreversible when a durable material or a non-human actor has been inscribed in the network.

Accordingly, Latour (1991) contends that social relations embedded in artefacts are a stabilising factor of society, "Society and technology are not two ontologically distinct entities but more like phases of the same essential action" (p. 129). Society and technology could not be discriminated and divided; they exist in the social structure to serve the purpose of *checks and balances* in power relations.
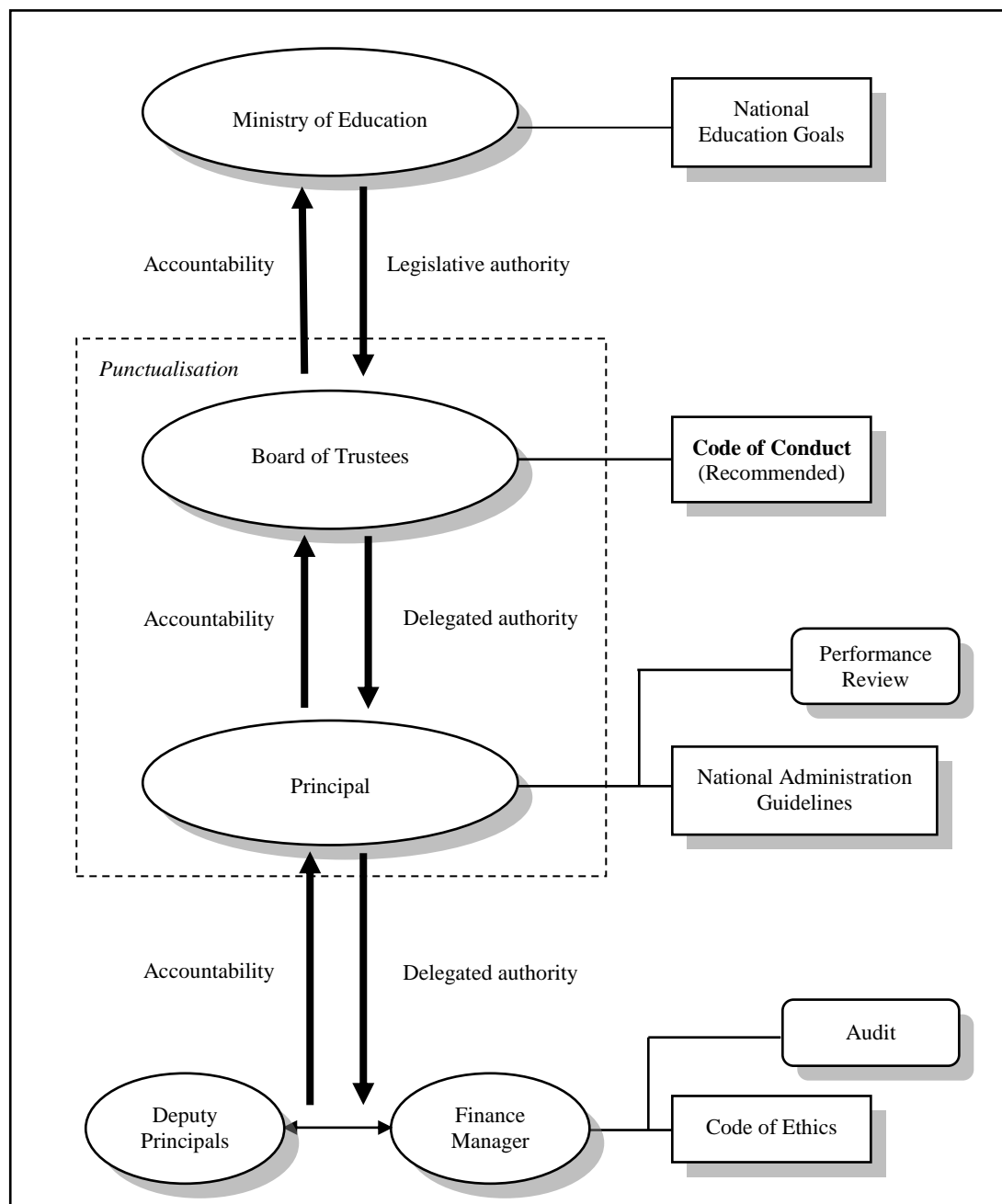
Figure 15. The actor-network framework of effective school governance

7.6   Conclusion

The budgetary process creates a network of power relations which empowers the Principal to exercise control over budgetees in resource allocation. Also, the decentralisation of school management gives rise to centralised decision making.

Generally speaking, the Board relies on the Principal who provides the necessary information to the Board for decision making. This work practice could enable the Board to carry out its governance duties efficiently, but it may create the potential risk of information bias and gaining private interests.

To maintain power, the Principal recruits a diverse variety of allies to build stronger networks. This allows the Principal to define the obligatory passage point through which the other actors in the network must pass. At this stage, particular struggles and controversies are resolved and the actor-network is black-boxed. However, the stability of the actor-network could be challenged when a new actor joins or an existing actor exits the network. When an actor leaves the network, it provides an opportunity for a new actor to enter the network. If the new actor's individual interest is divergent from the network's customary interest, betrayals and controversies may occur between actors. Most likely, the existing network breaks, the current focal actor is abandoned and a new actor-network forms. It is said that the black box is leaky, and it has to wait for a new focal actor to seal the black box. ANT would suggest that it is not any innate centralised or decentralised control that is important, but rather what is held together in the actor-network that keeps heterogeneous elements interacting to create power, authority and stability.

The findings of this study provide evidence that budgeting not only is a political tool for control over budgetees but also acts as a means of actor-network to connect individuals, to fabricate and negotiate their common definitions and interests aiming for the achievement of organisational objectives. The emergence of common interest in school budgeting helps the education reforms in devolution of school management, performance accountability, and improving effectiveness and efficiencies.

Tomorrow's Schools, which advocate stakeholder participation, has inherent advantages and disadvantages. Stakeholder participation enables schools to be responsive to local needs and align individual interests to the school objectives; however, it increases competition for leadership between the Board Chair and the Principal, as well as competition for the already limited school resources.

More specifically, there are five lessons learned. First, relations of power in the budgetary process are exercised by all stakeholders, not by the controlling actor. What are held in the budgetary process are the alliances of the budgeters and the budgetees through the use of expert knowledge and accounting technology. Second, the school context is conceptualised as an open system in its socially constructed reality whereby human and non-human entities are interacting and interrelated. In the open system, social phenomenon and construction are subject to change over time in relation to its context. The stability of an actor-network in schools would be challenged by the entry or exit of an actor leading to network breakdown and new network formation. Third, to protect the integrity of the principal performance management system, the Principal's performance should be reviewed regularly and independently by someone from outside who is an accredited education professional. Fourth, the conduct of a trustee of a board should be regulated by a Code of Conduct. Fifth, the presence of checks and balances in the power relations between the Board Chair and the Principal is essential to effective school governance, and it is also a fundamental element of contribution to the stability of a society.

CHAPTER EIGHT
RESEARCH CONCLUSIONS, CONTRIBUTIONS AND
RECOMMENDATIONS

8.1   Introduction

This chapter provides a summary of the findings of this study, the contributions it makes to the literature and recommendations for further research. This study provides case-based research of financial management particularly focusing on the budgetary process in schools. A political view of budgeting appears to be useful to an understanding of actors who are interacting in its contextual reality. The inseparable connections between humans and non-humans informed by ANT explain the formulation of budgeting at schools. The budgetary process is universal at schools for the purpose of operation, control and management. However, each school's process is unique and distinguishable, characterised by its tradition, culture, management style, and elements of the local community. It is observed that the budgetary process is an input/output transformation whereby the school Board, management, teachers, students, parents and community members align their interests with the school's strategic objectives in order to meet national education goals. An individual actor's interests in the budgetary process are shaped by the actor's own life experience, level of authority, desire for power, and knowledge about the accounting technology. Owing to the dynamics of these social and technological contexts and the actors' efforts involved in budget inscription and translation, including negotiations and collaboration, the success or betrayals of budget management depends on the irreversibility or the stability of the actor-networks.

This study has provided evidence in how sociological ideas drawn from ANT can be used in accounting research. It has also examined the forms of interrelationship between the participants in the budget setting process at schools. It has emerged that interactions between humans, and between humans and non-humans are in the

alliance of forming networks. These networks are fabricated and interwoven. An actor's attributes are shaped by the interrelations with other human and non-human actors. The formation of an alliance is a critical success factor of power relations that keep actors in place. The next section discusses the empirical contributions of this study.

8.2   Empirical Contributions

Public education is a significant service provided by the government and an integral part of the community. The effectiveness and efficiency of school management is of interest to taxpayers, politicians, educational professionals and academics. Particularly, budgeting is an important process in the financial management of the school sector. However, the study of participant interrelations during school budgetary process have been subject to little research and consequently are not well understood. This study extends the budgeting research literature by examining the budgetary process in three secondary schools of different size and decile in the same region of the country. Specifically, the contribution to the knowledge base is valuable through the participant observation while the researcher was working at one of the schools being studied and involved in the budget setting process for a number of years. The researcher's live experience is important to enrich the data and increase the validity of the study, hence highlighting the significance of this study.

Chapter Five discusses the background of three schools and compares their similarities and differences. They are similar in five areas: management structure, budgetary approach, budgeting system, budgetary control and stakeholder engagement; however, they exhibit differences in the leadership style, power influence and authority delegation (see Table 17). The empirical contributions of this study are presented below in three areas and with a number of recommendations at the end.

8.2.1 Contribution to Understanding the Budgetary Process in the New Zealand School Sector

The enactment of the Education Act 1989 revolutionised the financial management in the New Zealand school sector, making it part of the drive for self-managing schools, hence the school governance. The school governance body that has been established to manage finances at school, therefore, is the Board of Trustees. In accordance with the Education Act, the Board of Trustees delegates its management responsibilities to the Principal and his or her staff, and the Board remains in its governance role. This line of reporting reveals a chain of work relationships involved in the budgetary process.

Self-managing schools are funded by government grants by the decile rating of the school, with the schools of lower decile receiving more money. Generally, the participating schools in this study consider the government grants they received to be insufficient to provide quality education which required employing additional teachers, improving ICT facilities and deploying education out of classroom activities. To supplement the shortfall in government funds, these self-managing schools raised local funds through school fees, parent donations, fundraising and sponsorships. Therefore, the need for preparing school budgets goes beyond the statutory requirement of the Education Act 1989, namely to submit school audited financial statements to the Ministry of Education no later than 31 May in the year after the previous financial year. Schools now need to monitor and control income and expenditure throughout the year as part of the budgetary process, making sure that they are able to meet their financial commitments as and when they arise.

Generally schools take a conservative approach in budgeting in order to prepare for rainy days, with an emphasis on income stability, expenditure adjustments in line with roll size, and avoiding staff redundancies. The schools aim for a balanced budget after depreciation. For those schools struggling to make ends meet, preparing a deficit budget after depreciation is unavoidable, but it is not financially sustainable. A deficit budget requires a strong reason supported by a financial strategy to put forward to the Board for approval.

The school annual budget is firstly developed with an estimated income based on the provisional roll and then analysing costs in line with the annual targets and learning priorities. Low decile schools are more vulnerable to roll changes during the year. This uncertainty creates financial hardship to the schools to achieve the annual targets while meeting the budget. To make it worse, low decile schools face difficulties to raise local funds through parent donations and fee-paying international students. Similarly, high decile schools are also conservative in estimating the number of international fee-paying students and parent donations. The Board's concern about sufficient income to run the schools is a "must" agenda at the board meeting.

Analysing costs is the most tedious process whereby a trimming exercise is unavoidable. Most often, the "nice to have" expenses are cut to allow room for curriculum priorities. These "nice to have" items include overseas trips, replacement musical equipment, and upgrading computing facilities, to name a few. The Principal, working alongside the Board, has to make hard decisions between a balanced budget and improving student learning.

Budget holders use the current budget level to propose the following year's budget, hoping to maintain at least the similar amount of budget for improving student achievements. They perceive that an increase in budget could provide room for budget cuts. On the other hand, the Principal adopts the "needs-based" rule to prepare the budget. The Principal regards needs-based budgeting as more applicable to reflecting the changing operating conditions over the years regarding curriculum-related priorities, roll size, parent donations, the number of international students and the increasing demands from the parents. Most importantly, needs-based budgeting enables the Principal to make discretionary decisions to maintain his or her power and authority. The Principal's role as the final decision maker in allocating resources is common to all schools.

Besides an operating budget, schools also develop a capital budget to invest the school reserves in learning equipment that has long-term benefits to student learning. In the circumstances of financial constraints, schools cut costs by deferring spending on capital items at the expense of student learning. What is of great

concern in this study is that the low decile schools (e.g. School Robin and School Kea) are placed in a disadvantaged position to attract students, hence lowering their roll-based government funding, which in turn has a negative flow-on impact on their financial base to improve student achievements. There may be ways to address the issue of school's being under-resourced, particularly low decile schools.

The budgetary process generally consists of five steps. First is the development of guidelines for the budget holders to prepare the budget for their responsible area. Second is the preparation of the budget document which compiles the budgets from all budgetary areas. Third is the modification of the budget in light of the expected revenues generated and the budgeted expenses incurred during the year. Fourth is obtaining approval from the Board of Trustees. Fifth is budget implementation and management.

The budget holders (usually the Heads of Department/Faculty) perceive budgeting as useful to voice their needs and maintain their status quo. The budget holders (the controllee) are driven by their interests in improving student achievements through the use of budgeting. On the other hand, the Principal (the controller) considers the budget as a mechanism to hold the budget holders accountable for their spending within budget. The controller may be driven by a desire for maintaining power and authority over subordinates. In instances of overspending, the budget holder would receive a warning from the Principal with a co-signature of the Finance Manager and a reference to the relevant school policies and procedures. The Finance Committee was also presented with a copy of this warning. This act of coercion ensures that the controller could manage the budget and be accountable to the Board of Trustees. The controller–controlled work relations arising from their differing views of budgeting inevitably create controversies. To settle the controversies, the controller develops dialogues with the controllee to justify the allocations of the budget. To obtain "buy-in" from the budget holders, the Principal, often lacking financial literacy, allies with the Finance Manager to gain credibility from the financial perspective (see section 6.4). Also, the Principal allies with the Board Chair to gain legitimacy from the governance body. The degree of tension between the controller and the controllee varies with the leadership style of the Principal from democratic to autocratic, whereby the power influence of the democratic Principal is much less

than that of the autocratic Principal. A democratic Principal has a positive attitude towards the inputs from the budget holders, whilst an autocratic Principal tends to play down the budget holders' participation in the budgetary process. In School Kea the democratic Principal encourages participation in budgeting whereby distributive leadership is adopted linking to open conversations and participatory management. This open-door policy enables the Principal to engage the participants to achieve budget-trimming goals. In contrast, the autocratic Principal in School Robin controls the budgetary decisions by downplaying the inputs from the participants and exercising preferential resource allocation decisions. Quasi-delegation of authority is apparent whereby the autocratic Principal overruled the Finance Manager's decision, which has damaged the school's reputation in the community. Generally speaking, democratic leadership is likely to exercise a consultation process more extensively than the autocratic. Likewise, delegating authority by the democratic Principal to the Heads of Department/Faculty is comparatively more effective than his or her autocratic counterparts. Overall, the participants working under a democratic leadership consider their participation in budgeting as a democratic process and they are enthusiastic to be part of contributions to the budget development.

In this study, it is worth noting that the Finance Manager devoted a large amount of energy to advocating the needs and purposes of budgeting, making reference to the policy and procedures. The Finance Manager, the spokesperson for the Principal, established both lateral and vertical communication channels to solicit support and compliance from the budget holders. It is argued that the need for an accounting and finance professional at school is crucial to effective financial management. Budget monitoring and control is a specialised activity and can only be undertaken by persons with expert knowledge and skills in financial management. The evaluation of budget performance also requires accountancy skills to translate the school's financial results into figures and facts on the paper. In this regard, two out of three schools under study make use of external financial expertise to assist with the school finances and to strengthen their responsibility for financial management. This evidence has strongly demonstrated that financial management is a vital component of effective self-managing schools in the eyes of the school governance body, hence having a financially literate person at schools is essential. The financial expertise could be accessed in-house and/or out-sourced depending on the financial position

of the school. The findings of this study are consistent with the suggestion by Wylie and King (2004) that effective schools manage their finances with the assistance of the financial administrator (the Finance Manager in this study) who plays key roles in financial management.

With regards to budget monitoring and control, the Board Chair generally acts as a governance role, setting the financial priorities and overseeing the budgetary process. The Principal and the Finance Manager work closely together with a view to achieving the annual financial goals. Performance measures against budget under each budgetary area are monitored each month through reporting to the Board. The Principal–Board Chair relations are generally in a strong alliance that is built on trust and openness, confidence and transparency. However, the findings of this study reveal that too much trust placed in the Principal could tarnish the integrity of the Board governance. Too much trust placed in the Principal may compromise the Board governance role by making decisions in the absence of a full set of information. The voices of the staff may be blocked and never be heard by the Board. The debacle at Cambridge High School has revealed that too much trust placed in the Principal could engender a conflict of interest without the knowledge of the Board. The Principal of Cambridge High School was accused of obtaining pecuniary gains through her involvement in the affairs of the companies, assisting with their establishment and operation.

A dominating Principal would hamper the effectiveness of authority delegation. The senior management team (Deputy Principals and the Finance Manager) were reluctant to make decisions in the absence of a controlling Principal as they believed that their decisions would be overturned by the Principal upon his return. A dominating Principal would hinder the management team to carry out their responsibilities when the Principal makes decisions on behalf of them without their knowledge. By contrast, a dominating Board Chair could interfere with the school management in one way or another. In School Robin, the involvement of the Board Chair in school matters by directly appointing an associated contractor to undertake school projects may create a conflict of interest as stipulated in section 103A of the Education Act 1989. A dominating Board Chair may end up blurring his or her governance role by managing the school affairs at the same time, which could

damage its integrity. While it is necessary to integrate trust into work relations, it is possible to abuse it. There should be measures in place to regulate the conduct of both Principal and Board Chair.

To be an effective self-managing school, hence effective financial management, it needs people and systems to work together in line with the school's strategic objectives set out in the school charter. Schools should have policies and procedures to guide people to carry out their responsibilities. In School Tui, school policies and procedures are accessible to staff and they are considered as a living document for execution of their duties. Schools should have a good leader who is strategic and engages with stakeholders. A transparent strategic plan is vital to connect staff, students, parents and communities. The success of the Community Engagement Partnership Project in School Robin is an example of a powerful leader who could hold a wide range of stakeholders in place. To have healthy financial management, schools should have people who are financially literate to manage the school finances. To be sustainable under a deficit budget, the Finance Manager of School Robin made the school remain liquid in terms of cash flow and operate within the confines of the approved budget. And finally, schools should have an effective Board of Trustees to support school management in directing the school's strategic objectives.

8.2.2 Contributions to the Emergent View of Budgeting

Traditional accounting literature suggests that budgeting is a management tool for making rational decisions on allocating scarce resources, forecasting, planning, monitoring and control for the purpose of achieving organisational objectives (see section 2.7). There are increasing calls for studying budgeting in its social context which is complex and changing over time. Political and social variables are present in any organisation and schools are not excluded. While the traditional roles of budgeting in organisations remain useful for understanding budget-related behaviours, the findings of this study offer insights into the ways in which the role of budgeting is functioning in schools from social and political perspectives.

Given the Board of Trustees' authority delegation to the Principal, the Principal becomes a powerful person who can make discretionary decisions on how to allocate school resources. Financial resources are allocated to areas which have achieved high performance, to areas which have supported the Principal, and to areas which have higher return of investment. Whether these decisions are strategically aligned may not be of importance to the decision maker. In School Robin, Hospitality, which achieved good performance, was allocated more resources for upgrading the training restaurant whereas the ESOL Centre, with poor performance, was penalised by cutting the resources. Because of high performance and additional resources, Hospitality has attracted more students to enrol in this programme. This method of resource allocation is justified by the Principal's belief that resources are re-distributed in order to achieve the best possible outcomes given the limited resources. To do so, the Principal allied himself with the Board, particularly the Board Chair, to legitimise his power and authority over his subordinates. The Principal allied himself with the Finance Manager, who is accounting and financially literate, in order to increase his persuasive power over the budget holders. This form of alliance strengthens the power when it is put in action.

With regards to budget performance measurement, the accounting information flows downwards from the controller that holds the accounting information. The controlled budget holders have no option but rely on the information provided to evaluate the performance of their responsible area. Information given by the controller is taken as fact without questioning. The asymmetrical information control between the controller and the controlled has placed the Principal in a privileged position to articulate the school strategic plan and promote the financial goals. Budget holders with unfavourable budget variances would receive a warning from the Principal regardless of any reasons that are beyond control such as rise in commodity prices. The findings of this study conclude that the controller–controlled power relations at schools are strongly established and must be taken for granted.

In a political environment, particularly of scarce resources, schools face uncertainties on fluctuating roll size, unreliable locally raised funds and increasing demands from the communities. Even a well-developed budget may not account for everything that will happen in the year ahead. A budget review is generally

implemented to re-assess the amount required by budget holders. The presence of uncertainties creates opportunities for the budget holders to negotiate with the controller. In School Robin, the Heads of Department/Faculty, expressing their concerns about the budget cuts, worked together to submit a counter-budget proposal to the Acting Principal. Their proposal was to compensate for the budget cuts by the same amount of increase in the budget for the following year. Surprisingly, their strategy succeeded at the end. The findings of this study reveal that the budget holders must hold a strong ground to present their case in terms that are well understood and valued by all stakeholders. To gain success in negotiation with the Principal, the budget holders of similar fate (i.e. poor student achievements in their responsible area) form an alliance in presenting the case to the Board as a group rather than an individual. In School Robin, the Head of English allied with the Head of Arts and they succeeded in putting forward their case to the Board for purchasing digital cameras which were outside the budget. They believed that their alliance could strengthen their bargaining power over the resource contest. Forming an alliance with participants, whether they are the controllers or the controllee, during the budgetary process is a powerful strategy to serve as a form and source of power. In schools, the controllers (the Principal, the Finance Manager and the Board Chair) use budgeting to establish full control and vertical communication to bring the controllee (the budget holders) in line with the school's strategic objectives. This motivation comes from the desire to conform to the legislative requirements, to discharge the duty of accountability and to centralise power by enforcing what needs to be done.

The emergent view of budgeting allows the ability to understand the roles of budgeting in the context of the social and political environment. More specifically, the political use of budgeting extends the traditional theory of budgeting as making rational decisions on allocating resources, which is helpful to examine budget-related behaviours and motivations. Additionally, budgeting can be used to establish and maintain power and shift the decision-making discretion to the person who has the accounting knowledge or has the ability to enrol the person holding the accounting information. The strong alliance between the Principal and the Finance Manager in budget management and control activities has shown this form of power relations. This confirms Foucault's (1980) theory of power and knowledge as well as

Callon's (1986) and Latour's (1986) translation model of power. Power is exercised through relationships. The findings of this study contribute to studying the roles of budgeting through examining participants' behaviours and motivations, rather than as pure economic decision making.

8.2.3   Contributions to Understanding School Governance

It has been more than 20 years since the launching of *Tomorrow's Schools* education reform in 1989. The school governance is now vested in the largely parent-elected Board of Trustees. The localisation of decision making to schools has empowered the Board to appoint, manage and appraise the Principal. To carry out the governance responsibilities effectively, the trustees should have professional knowledge or experience of their own. However, there are no guarantees that the trustees have the right mix of skills in governance and financial literacy. This study contributes to the literature of school governance through examining the work relations between the Principal and the Board of Trustees, particularly the Board Chair, during the budgetary process and stakeholder engagement exercise.

Effective school governance requires good work relations between the Board of Trustees and the Principal. They work together to develop shared understandings of the school directions in meeting national education goals. The findings of this study conclude that good work relations between the Principal and the Board Chair are built on high-trust school cultures. Their ongoing work relations, however, could be challenged when this kind of trust is abused. Too much trust in the Principal could support a dominating Principal in the boardroom discussions, and creates opportunities for obtaining personal gains or personal interests. The resignation of the Cambridge High School Principal was a resultant punishment for a dominating Principal who obtained private gains through the abuse of over-trust by the Board of Trustees. Also, a strong reliance on the Principal has the potential risk of the Board not getting all the information it needs to make good decisions. For example, the Board's decisions, made upon a verbal report by the School Robin Principal, may not take into account the views of different groups of stakeholders.

Chapter Six reveals the unreconciled work relationships between the Principal and the Board Chair in School Robin. Their differing views in stakeholder engagement led to the departure of the Principal, after which a dominating Board Chair led the school. The Board Chair made management decisions on assigning a service contract without following proper procurement procedures in accordance with the Ministry of Education's guidelines. The Board Chair undermined the Principal by directly discussing school issues with staff without the knowledge of the Principal. By doing so, the Board's governance role has been blurred by the Board Chair's dominating character being involved in school management.

Evidently, the power relations between the Principal and the Board Chair could be maintained when there is an equal voice on the Board and mutual trust between the two parties. When one of these two elements is missing, it is likely that their work relationship will be challenging and it will not last long. As a result, all the stakeholders suffer – the teachers, who are confused by mixed messages about who really leads the school; the students, who are learning in an unstable learning environment; and the parents, who lose faith in the stability of the school governance which would affect their children's learning behaviours.

The education professionals participating in this study have experienced that a successful school requires a Principal who is financially literate, a good leader, strategically oriented and able to engage stakeholders. A trusting Principal-Board Chair relationship also supports an effective school governance system. Their work relationship serves the role of "checks and balances" in a democratic and consultative manner. Stakeholder engagement, particularly with the parents and the local communities, strengthens the board governance system to provide local support and monitoring, and to better connect parents and schools to improve student learning. The other side of the coin is the time consumed and costs incurred in engaging stakeholders, which increases demand on the already slim school budget. Nevertheless, the participants in this study argued that connection with the parents and communities is essential to a successful self-managing school.

The participants in this study question the capabilities and skills of the trustees, who come from all walks of life. The Board may govern and manage the school at the

same time. The Board may advise, but not govern. A trustee generally receives a nominal fee of $55 per meeting while the Board Chair receives $75. The amount of trustee fees received is not commensurate with the amount of responsibilities the trustee has in the Board. What kind of quality does one expect of a voluntary Board of Trustees in carrying out the trustee role? The Board of Trustees is a highly demanding role. The drawbacks of the education devolution were seen as the Board's heavy workload and responsibilities – the large amounts of reports to read, enduring time commitment, long hours of meetings and trustees' lack of relevant skills and knowledge.

The schools in this study appointed external professionals as co-opted trustees to strengthen the governance role of the Board. This has provided evidence that the school boards are under-resourced – lack of necessary knowledge for their work, lack of funding to provide training to the Board, and lack of time needed to undertake board work. These concerns have justified the ongoing outcry from the New Zealand School Trustees Association that schools are under-funded to provide quality education that the parents demand. Some aspects of decentralisation should be reviewed to address these concerns; to suggest a few – accessibility to education professionals appointed by the Ministry of Education to work with the Board; a requirement of having at least one trustee who is financially literate; and a mediation mechanism introduced by the Ministry of Education to resolve the differences between the Principal and the Board. To conclude, the contributions of this study add to the knowledge base the recipe of effective school governance – trust and confidence in Principal–Board relationships. Still there are good cases for celebrating the excellent jobs that boards of trustees are doing to work together as a team of governors with the school professionals for the best interests of the students.

8.2.4 Recommendations to the Ministry of Education

Self-managing schools are generally prudent in their revenue estimates, cautious in spending and hence conservative in budgeting given the uncertainties embedded in curriculum priorities, fluctuating roll size, parent donations, number of international fee-paying students and the increasing demands from the parents. These

uncertainties have a big impact on low decile schools which are largely reliant on roll-based government funding, unlike the high decile schools which are most likely able to attract locally raised funds to supplement the shortfall in government funding. While some schools can maintain their existing programmes without budget cuts, most schools need to cut their capital budget to cover the shortage in operating costs. Priorities and trade-offs have to be exercised between the "must spend" items and "nice to have" items. The "must spend" items are curriculum resources, support staff costs, overheads, and property repairs and maintenance. Those "nice to have" items, including overseas trips, musical equipment, data projectors and school camps, often have to give way to the "must spend" items. The low decile schools are vulnerable to financial risk especially when their roll persistently declines, which in turn generates insufficient funds to support learning facilities and equipment. This problem spirals in a way that low decile schools would have little attraction to the parents sending their children to these under-resourced schools. Under the government's formula-based funding, low decile, particularly undersubscribed, schools should be considered individually and working closely with the government to find ways to ease their financial position in order to establish a conducive learning environment to attract more students. An interest free loan facility for a fixed term, say five to ten years, should be available to schools that are in need of additional funding to put them back in a healthy financial position.

The findings of this study conclude that the work relationship between the Principal and the Board is vital to effective self-managing schools. Either a controlling Principal or a dominating Board Chair is undesirable for effective school governance and management. The integrity of the Board of Trustees should be maintained at all times, whilst the performance of the Principal should be monitored regularly. It is suggested that the performance of the Principal should be reviewed regularly, say every year, by an appointed education professional. A Code of Conduct should also be developed by the Ministry of Education to monitor the performance of the Board. Educational disparities arising between the Principal and the Board could be mediated by an appointed education professional. An education professional is appointed by the Ministry of Education to provide advice to the Board, undertake Principal performance appraisals and act as a mediator when necessary to resolve

differences between the school management and its governance body. The appointed education professionals could be those retired Principals who would like to take up an advisory role instead of a principalship. They are expected to be able to provide relevant and timely support to the Board according to their work experience in schools. The employment of an appointed education professional ensures that the advice provided is independent and impartial to maintain the public trust in the Board of Trustees.

The concerns about the competencies of the trustees to carry out governance responsibilities are ongoing in schools. Appropriate training provided by appointed education professionals should be accessible to schools at no cost when and as schools need. This external support and training would free up time for schools to focus on student learning and achieving national education goals. In addition to training provisions for the Board of Trustees, there should be a requirement for the Board to have at least one trustee who is financially literate. If the parent-elected Board does not have this financial expertise available within the Board, a co-opted or appointed trustee should be sought externally.

The recommendations are summarised for consideration by the Ministry of Education:

1. An interest free loan facility for a fixed term, say five to ten years, should be available to schools, particularly those low decile under-resourced schools which are in need of financial assistance to provide an environment that is conducive to learning for attracting more students.

2. A team of education professionals appointed by the Ministry of Education should be established to provide local and timely support at no cost to schools in areas including:
   - providing advice to the Board of Trustees to address issues and take prompt actions;
   - reviewing the Principal's performance regularly, say once a year;

- acting as a mediator to resolve the educational disparities between the Principal and the Board of Trustees; and

- providing appropriate training to the Board of Trustees with the required range of knowledge and skills.

3. A Code of Conduct should be developed by the Ministry of Education to regulate the performance of the Board of Trustees through providing guidelines on ethical and professional behaviour.

4. There should be a mandatory requirement for the Board of Trustees to have a trustee who is financially literate [37], which enables financial expert knowledge and skills to be readily available to the Board.

8.3   Theoretical Implications

Chapter Four provides an overview of ANT and its application in management accounting research. One significant application of ANT is to study the organisational process whereby the respective interests of individual human and non-human actors are aligned into a social and technological arrangement (Gao, 2005). This study adds to ANT literature on understanding the budgetary process in the school sector. This study concludes that the budget plays a critical role in interest alignment and that the budget is not a stable black-boxed technological artefact. The black box can be re-opened when the actor-network breaks down. Paradoxically, the budget can be established as an actor that can extend and mobilise networks of relations with the users of the budget to construct power relations. The following sections summarise the applications of ANT in this study.

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[37] In the school context, financial literacy includes the concepts like income and capital, assets and liability, investment and borrowing, planning and forecasting, budgeting, compound interest and time value of money.

8.3.1 Application of Actor-Network Theory to the Budgetary Process

The construction of a budget is the result of interactions between a complex network of actors as diverse as the Ministry of Education, the Board of Trustees, the Principal, senior management, middle managers, policies and procedures and the accounting technologies. The Ministry of Education issues guidelines to schools in terms of National Administration Guidelines and National Education Guidelines. The Board of Trustees is empowered under the Education Act 1989 to undertake the governance role; the Principal is given the delegated authority to manage the school. The senior management (Associate Principals, Deputy Principals, Assistant Principals and Finance Manager) and the middle managers (Heads of Department/Faculty) support the Principal in running the school; and school policies and procedures are established to guide the staff to carry out their responsibilities. The accounting technologies are used to generate the annual budget which measures and monitors the school performance. These actor-networks are not uniform or stable. The stability of these networks depends on the focal actor who enrols many actors into the networks with aligned interests. When the actor-network is stable, the budget is black-boxed. When the actor-network is unstable, the black box is said to be re-opened. The focal actor, usually the Principal, does not exist apart from the school context, but is made significant through continuous relations with other actors in the networks such as the Board Chair, the Finance Manager, the Heads of Department/Faculty, students, parents and the community. By applying the concepts of actor-network, inscription and translation to the budget setting process, one can better see the multifaceted nature of the connections between actors who are kept in place.

With the advent of budgeting, the budget holders are connected and participate in the process. The Principal, allied with the Finance Manager, obtains "buy-in" from the budget holders through consultation, incentives and coercion to the extreme. The traditional bonding between the Principal and the Board Chair strongly illustrates the power relations between them within the school. In School Robin, a verbal report by the Principal was accepted by the Board without seeing a detailed written report. The Principal continually enrolled actors into the budget in order to achieve the annual targets stipulated in the school charter. He allocated more resources to areas

of high student achievements that would support him. Similarly, the alliance between budget holders in areas of low student performance making a case to the Board for additional resources was a mode of negotiation that influenced decision makers and strengthened the power of actor-networks. Controversies and challenges are inevitable during budget negotiation. The Head of Hospitability requested budgets to upgrade the training restaurant; the Head of Music wanted to purchase musical equipment; and the Head of ICT desired for data projectors installed in each classroom. These conflicting individual interests required efforts to align them with the school global intent – a balanced budget. The budget holders' participation in budgeting provides opportunities for interest alignment and actors' alliance. The resultant interest alignment is visualised by the inscription of the budget document which is said to be black-boxed. At this point, the budget becomes a compliant document that holds the budget holders accountable for their spending.

An ANT-informed interpretation of budgetary process allows researchers to see how the role of budget, the interests of actors, and the use of accounting technologies achieve their significance through relations with other actors in the process. While allocating resources, the role of the budget serves to connect budget holders of diverse interests to working towards the annual targets. The budget is also used by the Principal to maintain his authority and power through centrally exercising resource allocation decisions. This form of power was further objectified by using the top-down accounting information control that labelled what was acceptable (spending within budget) and what was unacceptable (spending over budget). On the other hand, the interests of individual budget holders are visualised through their budget proposals. The budget performance of responsible centres was evaluated through the production of variance reports by the accounting technology. Overspending warranted a written warning from the Principal with the co-signature of the Finance Manager. This chain of budget alliances forms the complex social structure that has become common in the school environment.

In addition, the notion of betrayals could happen when a new actor joins or an existing actor exits the network. In School Robin, the recruitment of the new Board Chair re-shaped the existing actor-network. In contrast to the tradition of collegial work relationships, the Principal and the new Board Chair exhibited competing

parallel interests of the identity of the focal actor. The role of focal actor was later shifted to the new Board Chair who succeeded in aligning the divergent individual interests to form a new actor-network – a newly developed "mission, vision and values". The Principal resigned, an Acting Principal was appointed, and finally a new Principal was recruited. The new Principal disengaged himself from the existent actor-network and attempted to act on his own. He made financial decisions that bypassed the Finance Manager. He overturned the Acting Principal's promise that an increase in the following year's budget would compensate for the budget cuts. The new Principal's disengagement caused the existent actor-network to disintegrate resulting in staff leaving, particularly the Finance Manager and the unsettled actors of divergent interests. Thus ANT indicates that the identity of the focal actor may change when the constituent elements shifts. It is concurred that the Principal, as the focal actor, is an important element in the budgetary process. But, while this element may be necessary, it is not sufficient for its success. It requires a continuous process of translation to form the actor-networks – a process which is not without controversies.

The ANT interpretation of this study suggests that the four stages of translation: problematisation, interessement, enrolment and mobilisation demand a durable material to bind together different actors. In this study, the durable material was the annual budget that could meet the school's strategic goals. During the problematisation stage, the annual targets, in terms of budget allocation, needed to be communicated to the budget holders, understanding who the participants were and what their interests might be. It then determined how diverse individual interests could be aligned with the school's objectives. Once the obligatory passage point has been established, the focal actor – the Principal – started employing strategies to make sure the actors would pass through without challenges. He enrolled the Finance Manager, who worked closely with the budget holders to understand their needs and provide training in budget preparation and management. The interessement stage was directed towards convincing the budget holders that a budget was developed in a way that it would accommodate the needs of each budgetary area within the resources available. During the enrolment stage, negotiation and compromise activities were involved – voices were heard and acted upon; incentives were introduced; and the budget holders were empowered to make

decisions within budget. The final stage – mobilisation – required the allied actors to enrol more actors into the network in order to stabilise the network; and finally the budget was black-boxed. Beyond that, the focal actor needed to monitor the actor-network to ensure that the enrolled actors were acting faithfully.

The study of School Robin's Community Engagement Partnership Project highlights the success of the translation process. The powerful focal actor (the new Board Chair) was able to engage the multi-faceted nature of actors. The new Board Chair enrolled the stakeholders by convincing them he had a solution to raising student achievement – developing a mission and vision embracing the core values of all stakeholders, including teachers, students, parents and community groups. The stakeholders had the opportunity to be consulted, to be heard, and to be involved in the school matters through the focus groups. The durable material – the mission, vision and values – were always enrolled in the actor-network during the process of translation. "The Mission, Vision and Values will be visible and explicit in everything we do", said the new Board Chair. The stakeholders had a faith in the new Board Chair that he could bring a change to the school. In situations when enrolled actors become dysfunctional, the process of translation needs to employ again until a new actor-network emerges and the actors settle. The conclusion of this study has been an attempt to argue that the stability of an actor-network is a construction that turns on the strength of the material that is agreed upon by all actors.

To conclude, analysing alliances in the budgetary process suggests a problem when the power relation is tilted to one single actor.

8.3.2 Application of Actor-Network Theory to School Governance

Scholars[38] are using ANT to analyse the process of implementing new technology and design (Walsham, 1997). Previous accounting research studies mainly focused on examining the success or failure of accounting system change within an ANT

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[38] See Hanseth and Monteiro (1997); Hanseth, Aanestad, and Berg (2004); Quattrone and Hopper (2006); Stanforth (2006); and Tatnall and Gilding (1999).

framework (see Lowe, 1997, 2001b). Prior studies also place emphasis more on describing the process of forming actor-network through translation (see section 4.5). While understanding the forms of interrelations between participants in the budgetary process, this study extends the application of ANT to solving a controversy that has emerged from the regime of school governance. This study has identified the ungovernable characteristics of human relationships which could hinder effective school governance.

There are good reasons to build effective school governance in self-managing schools with both local support and central governmental monitoring. Effective school governance requires better connections between the governance body and the management team. The recent scandals around school governance and management (e.g. Cambridge High School and Fairfield College) have signalled that it is time to find new ways in which they can work together through a stabilised network. To make an actor-network stabilise, it is important to have a stabilising factor to *check and balance* power relations in schools. The stabilising factor should be a non-human actor because it is stable and irreversible, unlike humans.

In this study, the researcher recommends a Code of Conduct to regulate the conduct of the trustees of a Board (see section 7.5). The Code of Conduct could provide checks and balances which guide the trustees in fulfilling their governance responsibilities and meeting the expectations from the public interest. The expectations of trustees may include avoiding conflicts of interest, acting ethically and professionally, placing public interest above, unselfishness and maintaining integrity. The lack of regulation of the Board of Trustees is a loophole in the school governance, given the already established principal performance management system.

In School Robin, the dominating new Board Chair tended to interfere with the school management by assigning the Community Engagement Partnership contract to one of his acquaintances. By doing so, the independency of the school governance could be blurred by having the board member involved in day-to-day management of the school. With this non-human actor – the Code of Conduct – working in parallel with the human actors (i.e. the Board of Trustees), school governance is

most likely to be strengthened and will help achieve the school's strategic objectives and the national education goals.

8.3.3 Application of Actor-Network Theory to Management Accounting

This study has described how actor-networks are constructed during the budgetary process in schools. ANT translation process provides important lessons about the role of human and non-human actors in making budgeting decisions. These actors whether human or non-humans are critical elements in a set of power relations which are temporary and reversible. When a new actor enters or an actor exits from an actor-network, the actor-network may break when individual interests diverge. The actors start redefining their interests; translation process continues until a new actor-network is formed.

The power relations between the controller and the controllee are observed during the budgetary process when the controller is the final decision maker in allocating resources. This form of power relations may not be foreseeable under the principles of *Tomorrow's Schools*. However, the power relations could be haromonised by involving actors participating in the budgetary process. This makes the notion of participative budgeting more definitive in terms of cohesiveness and goal congruence. The implementation of budgeting in schools could not be seen as a discrete movement, but a continuous process of actor-networks whereby the actors shape the budgeting practices.

In this study, ANT stands to address the diverse roles of a budget in management accounting ranging from resource allocation, forecasting, planning to authorization function and political.[39] For future research in management accounting, ANT is a useful framework for a comprehensive and sophisticated analysis of the development and implementation of accounting practices or technologies. ANT is also a useful toolkit to account for the inter-relational interests and power relations between humans. ANT gains its popularity as an analytical strategy of networks or alliances which bring human and non-humans together in the same analytical view

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[39] See Table 2: The Roles of the Budget in Schools.

(Alcadipani & Hassard, 2010). It is possible to better see the complex and multi-faceted interrelations of the humans and non-humans in an organisational context in which accounting technologies are operated.

In a similar vein, Scapens (2006) argues that to understand the diversity in management accounting practices, it is important to study the complex mish-mash of inter-related influences which shape management accounting practices in individual organisations. The interrelations between actors in the school context shape the success or failure of the budgetary process. A success makes the budget black-boxed; a failure could create controversies.

Scapens (2006) acknowledged that there was a gap between the theory and practice of management accounting in the early 1980s. He recommended studying management accounting practice per sec, rather than comparing them to some theoretical frameworks. Scapens (2006) continued:

> *From the 1970s, when the mathematical economic models were supposed to tell practitioners how to do their management accounting, and the 1980s when management researchers began to realise that we had little real understanding of management accounting practice, to today when we have a much better understanding of the complexity of the processes which shape management accounting practices, we have come a long way. But it has taken a long time; and the research has followed practice—with researchers seeking to understand and theorise what practitioners do and how practices evolve. The challenge for the future is to use this theoretically informed understanding to provide insights which are relevant and useful for practitioners; for management accounting research to have more of an impact on practice.* (p. 28)

This study has implications for providing insights into understanding management accounting practices taking account of the prevailing organisational and social context in which they are operated.

8.4   Implications for Practice and Policy

This study is relevant to the Ministry of Education for them to review the guidelines provided to schools in the *Financial Information for Schools Handbook*. The

handbook intends to promote good financial management practices at schools. It also highlights the importance of a financial plan in terms of budgeting. The findings in Chapter Five make it evident that the schools under study are following the Ministry's guidelines in developing a budget and tend to outsource financial expertise in implementing good financial management practices. This evidence has indicated that schools are lacking an in-house financial management expert. It would be beneficial for the Ministry of Education to provide more training to schools in financial management, particularly to the Board of Trustees.

The Ministry of Education requires the Board of Trustees to identify the school's education priorities, to develop a budget that addresses these priorities, and to monitor and report on this expenditure. All members of a school Board are collectively accountable for the public funds. Good practices of school governance on financial resources require the expertise of the accounting profession. In this regard, the Ministry of Education does not spell out the necessity of financial expertise available in the school Board. As such the level of access to financial expertise may vary from school to school. Ideally, effective financial management requires the Board to have the right mix of skills and knowledge to apply, manage and monitor the financial resources. It is recommended that the Ministry of Education should legislatively require the school Board to have at least one trustee who has the financial skills and knowledge to implement effective financial management.

In addition, Chapter Five and Chapter Six have provided evidence that the success of achieving the school's strategic objectives should involve stakeholder participation. The forms of stakeholder participation could be fostered through a mixture of information, consultation, partnership, delegation and control. The findings also provide insights to school principals and trustees into the stakeholder engagement which facilitates the school Board to *buy-in* the share of stakeholder participation in school directives. The success of School Robin's Community Engagement Partnership Project was a piece of concrete evidence that the demand is out there for stakeholder participation in school directives. The contrast of characteristics between School Robin, School Tui and School Kea provides an opportunity to examine both the benefits and the potential problems of stakeholder

participation. In the light of the scandals at Fairfield College and Cambridge High School, the researcher believes that the benefits of seeking support and collaboration from stakeholders far outweigh the disadvantages. The participants in this study still have faith in self-managing schools which are operating under the principles of democracy. The failures of principalship in Cambridge High School and Fairfield College can cast some light on the importance of school–community collaboration to foster effective self-managing schools. Most significantly, stakeholder participation is the central principle of *Tomorrow's Schools*. Schools fostering stakeholder participation require a cadre of well-trained trustees that have a mission and vision to drive the school to meet the current and future needs of students. The Code of Conduct recommended by this study is one of the essential guidelines that each trustee should follow.

This study concludes that it is vital to offer all stakeholders an interest in school directives through consultation and partnership. Schools should start thinking about any possible participatory mechanism that fosters their unique social relations with their wider communities. In this way, it is highly possible that the communication gap among staff, students, parents and community members could be narrowed.

This study will also increase the interest of the public at large in engaging themselves in school governance and management for the benefit of our future generations who are nourished at schools. Significantly, the younger generation is the foundation of the future of the society which holds us together.

This study may be of relevance to the accounting regulatory body in strengthening the accounting standards for the public benefit entities and improving accountability for the public money. The newly formed External Reporting Board[40] should take into consideration the unique characteristics of the school sector while developing the accounting standard framework for the public benefit entities, which is proposed to take effective on or after 1 July 2013 for public sector entities, and 1 July 2014 for not-for-profit entities.

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[40] The External Reporting Board (XRB) was established on 1 July 2011 to replace the Accounting Standards Review Board. The XRB is an independent Crown Entity responsible for the development and issuing of accounting and auditing and assurance standards in New Zealand.

8.5   Limitations of the Study

The primary aim of this study is to examine the budgetary process in the school sector. Through case studies, empirical data was collected by participant observation, qualitative interviews and documentary analysis. This study has sought a better understanding of the participants' behaviours while making resource allocation decisions, the interaction between participants and the way in which power relations shape the participants' responses to the social reality. Given the small samples selected in only one region of the country, caution should be taken in the generalisation of the findings to the school sector as a whole. Despite generalisation not being the intention of this study, the assurance of trustworthiness of the findings is one of the vital ingredients of the study.

The researcher has acknowledged that one of the weaknesses of qualitative research is the prejudices and bias of the researchers who assign meanings to the social reality based on their own lived experience and their existing knowledge about the phenomenon under study. Throughout this study, steps have been taken to address the implications of the subjectivity that the researcher may bring to the research process. The researcher has been holding back her preconceptions of the research object and has remained open throughout the research process to alternative interpretations of the phenomenon being studied. Data has been triangulated through different sources seeking convergence to ensure findings are as reliable as possible. Member checking has been undertaken throughout the research process to increase credibility. Generalisation has been maximised by comparing similarities and contrasting differences between cases. The procedures of the study have been documented to ensure validity.

Furthermore, the scope of the study is limited only to the budgetary process. Other aspects of financial management such as cash management, credit control and capital investment have not been explored in this study. These areas may also have an influence to a certain extent on participants' behaviours and decision making. These influences remain unexplored in this study. Suggestions for further research are, therefore, recommended in the next section.

8.6   Recommendations for Further Research

The results of this study have cast some light on the budgetary practices in the school sector. Schools generally take a conservative approach in setting their budget, which is in line with the strategic objectives set out in the school charter. This study does not intend to assess the quality or legislative compliance of the budgetary process in schools. Rather, this study attempts to explore how the interactions between participants shape their decision making during the budgetary process.

Research on other aspects of financial management such as capital budgeting, cash management, credit control, asset management and the like could provide other pathways of research focus in the school sector relating to human and non-human interactions. Further research in these areas would be helpful to provide a more complete understanding of financial management practices in the school sector or other public sectors. Further, an extensive study of the budgetary process in the school sector involving large scale samples of different size and decile could be considered to enrich the knowledge base.

This study has considered the budgetary process in schools drawing on ANT to describe the results of interest inscription and translation. Actors, whether they are humans or technology, negotiate with each other to form an alliance in order to commit the solution to a problem. More case studies would be useful to justify the theoretical model (Figure 7) applied in this study and to extend its findings beyond the school sector. This model may also be used to examine and compare education reform in different countries, particularly analysing policies such as stakeholder participation.

This study not only employs ANT to understand the forms of relations between participants during the budgetary process, but also attempts to use this theory to provide a solution to a potential problem in school governance. This study has recommended an actor-network framework of effective school governance (see Figure 15). Further studies would be helpful to evaluate the practicability of this framework in both the school sector and other public sectors. This framework is open to challenges and improvements.

Nevertheless, this study has helped fill the gaps in understanding school financial management, particularly in the budgetary process, and makes primary contributions to the literature in qualitative accounting research and ANT. There is a need for similar qualitative studies examining more cases that support and complement the lessons that emerge from this study because of their persuasive power within policy-making arenas and institutions.

8.7   Concluding Remarks

This study reflects that ANT is a flexible and transportable theory across varied disciplines. It shows that ANT can be useful for studies of organisational systems such as the budgetary process where interactions of the social, technological and political are regarded as particularly important. Drawing upon ANT, this study has provided an understanding of the budgetary process and its management and control practices in schools, and the success or failure of an actor-network. It has also analysed the formulation of a budgetary system which could be seen as a socio-technical construction where human and non-human actors align their interests with the school's objectives. These actors negotiate, modify and fabricate to form a network that represents their interests collectively. Their interests are influenced by power relations that may change over time. Shifting of power could occur when a new actor enters or an existing actor leaves the network. This provides an opportunity for the existing actors to adjust, modify and redefine their interests. This would give rise to breaking the existent network and developing a new network that has stronger influential power to achieve organisational arrangements.

This study shows that the budgetary process adopts the concepts and reasoning of economics and decision making to legitimise power relations, and it is not without resistance and scepticism. When resistance occurs, the budgetary process becomes unstable. In ANT terms, the black box becomes leaky. To overcome resistance and scepticism, the translation process needs to be continually engaged with actors to form an actor-network. Similarly, ongoing stakeholder participation in school governance contributes to its success provided that checks and balances are put in place to regulate individual performance. The study of the use of accounting

technologies should pay attention to the interconnections between the technology, the actors who use it, and their social relations. There is clearly the need for future research on the applicability of ANT to problem solving, particularly in the social reality where society and technology are interrelated and indispensable. The researcher believes that there is some untapped potential for ANT in the accounting research, particularly where technological innovations are implemented.

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Appendix 1. Model of Income Statement

Income Statement

For the year ended 31 December 2007

	Notes	2007 Actual $	2007 Budget $	2006 Actual $
Income				
Government grants	3	3,226,462	3,156,318	3,049,038
Local funds	4	712,654	659,400	666,912
Interest		16,610	12,000	19,830
		3,955,726	3,827,718	3,735,780
Expenditure				
Local funds	4	614,590	541,196	576,064
Learning resources	5	2,502,012	2,433,074	2,267,794
Administration	6	163,296	170,700	184,700
Property	7	468,802	487,800	520,134
Depreciation	8	77,230	74,000	62,888
Amortisation of software		15,500	15,500	15,500
Finance costs		2,330	2,000	2,036
Loss on disposal of equipment		660	-	38
		3,844,420	3,724,270	3,629,154
Net Surplus		111,306	103,448	106,626

Appendix 2. Model of Balance Sheet

Balance Sheet

As at 31 December 2007

	Notes	2007 Actual $	2007 Budget $	2006 Actual $
Total Equity		524,704	393,398	289,950
Represented by:				
Current Assets				
Cash and cash equivalents	9	514,946	537,968	146,246
Accounts receivable	10	228,302	223,944	198,324
Prepayments		2,160	2,428	2,428
Inventories		2,970	4,200	2,598
Investments	11	100,000	50,000	50,000
		848,378	818,540	399,596
Current Liabilities				
Accounts payable	14	290,184	263,286	254,272
Income received in advance	15	118,416	100,000	100,770
Provision for cyclical maintenance	16	42,764	40,000	-
Painting contract liability	17	28,690	28,690	28,690
Finance lease liability	18	9,806	9,806	9,806
Funds held on behalf of the Ministry of Education	19	200,000	200,000	-
		689,860	641,782	393,538
Working Capital		158,518	176,758	6,058
Non-Current Assets				
Property, plant and equipment	12	447,000	314,136	397,390
Intangible asset	13	31,000	31,000	46,500
		478,000	345,136	443,890
Non-Current Liabilities				
Provision for cyclical maintenance	16	32,318	49,000	53,358
Painting contract liability	17	65,724	65,724	85,220
Finance lease liability	18	13,772	13,772	21,420
		111,814	128,496	159,998
Net Assets		524,704	393,398	289,950

Appendix 3. Model of Statement of Changes in Equity

Statement of Changes in Equity

For the year ended 31 December 2007

	2007 Actual $	2007 Budget $	2006 Actual $
Equity at the start of the year	393,398	289,950	183,324
Net surplus for the year	111,306	103,448	106,626
Total recognised income and expenses	111,306	103,448	106,626
Ministry capital contribution for equipment	20,000	-	-
Equity at the end of the year	524,704	393,398	289,950

Appendix 4. Interview Questions

INTERVIEW QUESTIONS

AUT
UNIVERSITY
TE WĀNANGA ARONUI O TAMAKI MAKAU RAU

Project Title: **Actor-network theory analysis of the budgetary process in the New Zealand school sector**

Project Supervisor: **Dr Keith Hooper**

Researcher: **Doris Hui**

INTRODUCTION

The purpose of this interview is to gather opinions on various accounting practices of financial management followed by schools. The interview will cover five main areas:

1. Budget Setting Process
2. Budget Control and Monitoring
3. Resource Allocation
4. Authority Delegation
5. Role of Board of Trustees

Your responses will be summarised and combined with others, if necessary, for reporting purposes. All replies will be treated with strict confidentiality and no individual identities will be identified.

INTERVIEW QUESTIONS

1.   Budget Setting Process

a)   Are strategic goals taken into account in the budget?

b)   Does the budget generally enforce the status quo?

c)   Is participative budgeting encouraged in the school?

d)   Who are the participants in the budget setting process?

e)   Who is the final decision-maker on the budget formation?

f)   Do budget holders ever challenge the budget decisions?

g)   Who are the active budget holders in relation to budget negotiation?

h)   Are the active budget holders popular in the eyes of the Principal?

i)   Does budget holder alliance exist for resource negotiation?

2.   Budget Control and Monitoring

a)   How is the annual budget monitored?

b)   Who are accountable for the budget variances?

c)   With whom does the Principal works closely in regard to exercising budgetary control?

3.   Resource Allocation

a)   What are the areas of high achievement within the school? How are they to be judged?

b)   Does the school intend to allocate more resources to areas of high achievement?

c)   Who is the best informed person as to the school's needs and resources available?

d)   Is resource allocation strategy articulated during the budget setting process?

e)   What criteria are based while exercising decision making on resource allocation?

f)   How do the budget holders respond to their budget which disappoints them?

g)   What aspects are important to make the budget setting process successful?

4.   Authority Delegation

a)   How is the school management style described – centralised or decentralised?

b)   Does effective authority delegation occur within the school?

c)   What role does the Associate Principal/Deputy Principal take in the budget setting process?

5.   Role of Board of Trustees

a)   What role does the Board play in the budget setting process?

b)   Does the Board accept a deficit budget?

c)   How does the Board exercise its governance role in monitoring the budget?

d)   Does the Board ask questions of the budget's decisions?

e)   What makes a school successful?

Appendix 5. Participant Information Sheet

PARTICIPANT INFORMATION SHEET

Date Information Sheet Produced:

28 March 2008

Project Title

Actor-network theory analysis of the budgetary process in the New Zealand school sector

An Invitation

I am Doris Hui studying at Auckland University of Technology. I invite you to participate in this research which is in fulfilment of the requirements for the degree of Doctor of Philosophy (PhD). Your participation is voluntary and you will be able to withdraw at any time should you wish to do so.

What is the purpose of this research?

The purpose of this research is to examine financial management in New Zealand school sector. The findings will provide the researcher with an understanding of the current accounting practices in the school's budgetary process. The identities of the participants will remain confidential and will not be disclosed in the final report. This research study will be submitted as a thesis to Auckland University of Technology in fulfilment of the requirements for the degree of Doctor of Philosophy (PhD).

How was I chosen for this invitation?

The participants will be school board members, school principals, executive officers as well as representatives from the New Zealand School Trustees Association, School Executive Officers Association, and Ministry of Education with experience of financial management in the school sector. You were chosen because you have work relationship with the selected schools under study and you are expert at school financial management. Upon your willingness to participate in the study, you will be asked to contribute information based on your experience of school financial management.

Participating schools were selected based on the size in roll and the level of decile.

What will happen in this research?

An interview will be arranged with each participant for discussion over a number of identified questions which will be disseminated to the participant prior to the interview.

What are the discomforts and risks?

There will be no risks or discomforts as this research is technical. It concerns the accounting treatment of revenue and expenditure items, and the accounting practices of financial management in the school sector. Participants are assured that all information will be treated with strict confidentiality and the schools' identities will not be disclosed, as well as that of the participants.

What are the benefits?

The benefits to the researcher and the participants include (1) an understanding of the current accounting practices of financial management in schools, and (2) providing insights into the interrelationship between the actors in the budgetary process.

How will my privacy be protected?

You are assured that all information will be treated with strict confidentiality and your identity and that of your school will not be disclosed.

What are the costs of participating in this research?

The cost of participating in this research is the time involved for the interview, which will be approximately an hour.

What opportunity do I have to consider this invitation?

Participation in this research is completely voluntary. You are asked to indicate your acceptance of this invitation by returning the enclosed consent form to the researcher within ten days. You will have opportunities to ask questions and to have them answered before, during and after the interview. You will have the right to withdraw yourself from the research by written notification to the researcher at any time prior to the completion of data collection.

The interview will be audio-taped and transcribed. If you withdraw during the process of data collection, all relevant tapes and transcripts, or parts thereof, will be destroyed.

How do I agree to participate in this research?

You are required to complete a Consent Form enclosed in this Participant Information Sheet, and return it to the researcher within ten days with the envelope provided.

Will I receive feedback on the results of this research?

If you wish, you will receive a copy of the research report. You will be given a transcription of the interview and asked to verify it in writing.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Dr Keith Hooper, keith.hooper@aut.ac.nz , 921 9999 ext 5758.

Concerns regarding the conduct of the research should be notified to the Executive Secretary, AUTEC, Madeline Banda, madeline.banda@aut.ac.nz , 921 9999 ext 8044.

Whom do I contact for further information about this research?

Researcher Contact Details:

Doris Hui, mqc4038@aut.ac.nz , 021 – 215 3069

Project Supervisor Contact Details:

Dr Keith Hooper, keith.hooper@aut.ac.nz , 921 9999 ext 5758

Approved by the Auckland University of Technology Ethics Committee on 5 May 2008, AUTEC Reference number *08/17*.

Appendix 6. Confidentiality Agreement

CONFIDENTIALITY AGREEMENT

Project Title: Actor-network theory analysis of the budgetary process in the New Zealand school sector

Project Supervisor: *Dr Keith Hooper*

Researcher: *Doris Hui*

○ I understand that all the material I will be asked to transcribe is confidential.

○ I understand that the contents of the tapes or recordings can only be discussed with the researchers.

○ I will not keep any copies of the transcripts nor allow third parties access to them.

Transcriber's signature: ……………………………………………………………………………

Transcriber's name:………………………………………………………………………………...

Transcriber's Contact Details (if appropriate):

……………………………………………………………………………………..

……………………………………………………………………………………..

……………………………………………………………………………………..

……………………………………………………………………………………..

Date:

Project Supervisor's Contact Details:

Dr Keith Hooper
Phone: 09 - 921 9999 Ext. 5758
Email: keith.hooper@aut.ac.nz

Approved by the Auckland University of Technology Ethics Committee on 5 May 2008, AUTEC Reference number 08/17.

Intermediary should retain a copy of this form.