## The University of Hull

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# LEADING THE TEACHING AND LEARNING - A STUDY OF TRANSFORMATIONAL LEADERSHIP IN SECONDARY SCHOOLS FACING CHALLENGING CIRCUMSTANCES

Being a Thesis submitted in partial fulfilment of the requirements for the Degree of Ed.D in School Leadership in the University of Hull.

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To my family for their continued support, patience and understanding, and to the headteachers and staff of the participating schools for making this research possible.

#### **Summary of Thesis submitted for EdD degree**

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on

#### LEADING THE TEACHING AND LEARNING

- A STUDY OF TRANSFORMATIONAL LEADERSHIP IN SECONDARY SCHOOLS FACING CHALLENGING CIRCUMSTANCES

This thesis researches headteacher leadership in secondary schools identified as facing challenging circumstances. It adopts the hypothesis that headteachers with strong transformational leadership behaviours are more effective in raising standards of student attainment than headteachers with other types of leadership behaviour. The thesis focus is original as few educational studies link headteacher leadership behaviours to measurements of student attainment and none have been done on schools within the English education system that are designated to be facing challenging circumstances.

The research design examines the leadership qualities that headteachers possess in challenging schools. Secondly, it considers the extent by which effective headteachers are transformational. Third, it investigates the relationship between headteacher leadership behaviours and student attainment. Finally, it explores the possibility of outlining a set of model behaviours that may work in similar schools to positively impact upon student attainment levels.

The evidence is drawn from a quantitative research design based upon teaching staff and headteacher responses from eight schools. All eight schools were deemed by their last inspection (OFSTED) to be offering at least a satisfactory level of education with the current headteacher being in post for at least three years and leading the school at the time of the inspection. The schools were divided equally into two groups enabling comparisons to be made between those schools raising student attainment in line with national improvements and those schools raising student attainment at least twice as quickly.

The conclusions of the study do not enable a model of good headteacher leadership practice that guarantees an effective transition for schools away from a formal

classification of facing challenging circumstances to be established. However, the research has established a number of elements that constitute effective leadership behaviours and attributes in such schools. In addition, it has been able to demonstrate that where these elements have been employed in their greatest intensity, the greater has been the school improvement in terms of student attainment.

### **Leading the Teaching and Learning**

# - A study of transformational leadership in secondary schools facing challenging circumstances.

# **CONTENTS**

			Page
<u>Cha</u>	pter 1 - Introd	<u>uction</u>	
	1.1	The purpose of the thesis	1
	1.2	Rationale and context	1
	1.2 (a)	Schools facing challenging circumstances	1
	1.2 (b)	The Need for Effective Leadership	3
	1.3	Limitations and Constraints of the Research	7
	1.4	Study Summary	7
	1.4 (a)	Literature Review	7
	1.4 (b)	Methodology	8
	1.4 (c)	Findings	8
	1.4 (d)	Discussion	8
	1.4 (e)	Conclusion	8
	1.5	Key questions for the research	9
<u>Cha</u>	pter 2 - Litera	ture Review	
	2.1	Introduction	10
	2.2	Leadership and transformational leadership behaviours	10
	2.3	The evolution of transformational leadership behaviours within schools	14
	2.4	Setting directions	18
	2.4 (a)	Vision	18
	2.4 (b)	Goal setting	20
	2.4 (c)	Motivation	21
	2.4 (d)	Values and the expectation of high performance	23
	2.5	Redesigning the organisation	23

# Chapter 2 - Literature Review (continued)

	2.6	Developing people	25
	2.7	Transformational leadership effects on student outcomes	27
	2.8	Assessing the effectiveness of transformational leadership over other leadership styles	35
	2.9	Effective leadership in schools facing challenging circumstances	40
	2.10	Summary	47
	2.11	Conclusion – Questions for consideration	50
<u>Cha</u>	apter 3 – Metho	odology	
	3.1	Introduction	53
	3.2	Determining the research strategy and design	53
	3.2 (a)	Research and educational phenomena	53
	3.2 (b)	A positivist approach	54
	3.2 (c)	An anti-positivist approach	56
	3.2 (d)	Adopting a positivist approach	60
	3.3	The multifactor leadership questionnaire	64
	3.3 (a)	The appropriateness of the MLQ	64
	3.3 (b)	MLQ – Reliability and validity	71
	3.3 (c)	MLQ statements	73
	3.4	Critics of the model	75
	3.5	Alternative models	76
	3.6	Choice of sample or survey population	79
	3.7	The data collection process	83
	3.8	The data analysis process	84
	3.8 (a)	Variables	84
	3.8 (b)	Chi-square – Testing the null hypothesis	85
	3.8 (c)	Inferential statistics	86
	3.8 (d)	Gender and school size differences	88
	3.8 (e)	Avolio and Bass Comparisons	88
	3.8 (f)	Effective leadership styles	88

# <u>Chapter 3 – Methodology (continued)</u>

	3.8 (g)	Headteacher participation		89
	3.9	Piloting the research		89
	3.9 (a)	Validity and reliability	89	
	3.9 (b)	Lessons from the pilot		90
	3.9 (c)	Strengthening validity and reliability		92
	3.10	Presentation of the findings		93
Chapte	er 4 - Findings			
	4.1	Introduction		94
	4.2	Respondents		95
	4.3	Reliability Analysis		96
	4.4	Headteacher leadership characteristics in challenging schools		97
	4.5	Transformational leadership behaviours		99
	4.6	Idealised Influence (Attributed)		99
	4.6 (a)	Differences - Group 1 v Group 2 schools (IIA	)	101
	4.6 (b)	Headteacher Assessments of IIA		103
	4.6 (c)	Idealised Influence (Attributed) – Summary		106
	4.7	Idealised Influence (Behaviour)		106
	4.7 (a)	Differences - Group 1 v Group 2 schools (IIB)	)	110
	4.7 (b)	Headteacher Assessments of IIB		111
	4.7 (c)	Idealised Influence (Behaviour) – Summary		112
	4.8	Inspirational Motivation		112
	4.8 (a)	Differences - Group 1 v Group 2 schools (IM	.)	114
	4.8 (b)	Headteacher Assessments of IM		115
	4.8 (c)	Inspirational Motivation – Summary		117
	4.9	Intellectual Stimulation		118
	4.9 (a)	Differences - Group 1 v Group 2 schools (IS)		119
	4.9 (b)	Headteacher Assessments of IS		121
	4.9 (c)	Intellectual Stimulation – Summary		122
	4.10	Individual Consideration		122

# <u>Chapter 4 – Findings (continued)</u>

4.10 (a)	Differences - Group 1 v Group 2 schools (IC)	124
4.10 (b)	Headteacher Assessments of IC	126
4.10 (c)	Individual Consideration – Summary	128
4.11	Gender differences in assessing transformational leadership behaviours	128
4.12	The influence of school size in assessing transformational leadership behaviours	129
4.13	Transformational Leadership Behaviours and their	
	influence of Performance	130
4.13 (a)	IIA and its influence on performance	130
4.13 (b)	IIB and its influence on performance	132
4.13 (c)	IM and its influence on performance	133
4.13 (d)	IS & IC and their influence on performance	134
4.13 (e)	Performance Summary	135
4.14	Transformational leadership – Summary	135
4.15	Transactional leadership skills	137
4.16	Contingent Reward	138
4.16 (a)	Differences - Group 1 v Group 2 schools (CR)	141
4.16 (b)	Headteacher Assessments of CR	143
4.16 (c)	Contingent Reward – Summary	144
4.17	Management by Exception – Active	145
4.17 (a)	Differences - Group 1 v Group 2 schools (MEA)	147
4.17 (b)	Headteacher Assessments of MEA	148
4.17 (c)	Management by Exception (Active) - Summary	148
4.18	Management by Exception - Passive	149
4.18 (a)	Differences - Group 1 v Group 2 schools (MEP)	151
4.18 (b)	Headteacher Assessments of MEP	152
4.18 (c)	Management by Exception (Passive) - Summary	153
4.19	Transactional gender and school size differences in ratings	153
4.20	Transactional Leadership Behaviours and their	
	influence of Performance	154

Chaj	oter 4 – Finding	s (continued)	
	4.20 (a)	CR and its influence on Performance	154
	4.20 (b)	MEA and its influence on Performance	156
	4.20 (c)	MEP and its influence on Performance	156
	4.21	Contextual value added	157
	4.22	Transactional leadership - Summary	159
	4.23	Laissez-faire leadership	160
	4.23 (a)	Differences - Group 1 v Group 2 schools (LF)	161
	4.23 (b)	Headteacher Assessments of LF	161
	4.23 (c)	LF and its influence on performance	162
	4.24	Summary of the findings	163
<u>Cha</u> j	oter 5 - Discussi	ion_	
	5.1	Introduction	166
	5.2	What are the effective leadership skills and qualities of headteachers in schools facing challenging circumstances?	167
	5.2 (a)	Length of headteacher service	167
	5.2 (b)	Effective leadership skills	168
	5.2 (c)	Effective leadership skills – Inspirational Motivation	168
	5.2 (d)	Effective leadership skills – Idealised Influence	170
	5.2 (e)	Effective leadership skills – Contingent Reward	172
	5.2 (f)	Effective leadership skills – Management by Exception (Active)	175
	5.2 (g)	Effective leadership skills – Summary	177
	5.3	Can any assessment of their influence, relative to student attainment by considered?	179
	5.3 (a)	Grouping the schools	179
	5.3 (b)	Group 1 v Group 2	180
	5.3 (c)	Effective headteacher leadership and student attainment – Summary	181
	5.4	Do their skills match those of a transformational leader?	182
	5.4 (a)	Vision and motivation	182
	* *		

182

## <u>Chapter 5 – Discussion (continued)</u>

	5.4 (b)	Staff development and Staff Needs	184
	5.4 (c)	Headteacher perceptions	186
	5.4 (d)	Non-transformational leadership characteristics	188
	5.4 (e)	Are headteachers in schools facing challenging circumstances transformational leaders?	189
	5.5	Can a set of leadership behaviours be identified as a model for similar schools?	191
	5.5 (a)	Stable leadership	191
	5.5 (b)	A model for leading the learning in schools facing challenging circumstances?	192
	5.5 (c)	Fitting the model to individual schools – context	198
	5.6	Reflections on the research design	199
	5.6 (a)	Limitations of the research (and design flaws)	199
	5.6 (b)	What to do differently	201
	5.6 (c)	Questions for further research	202
Спари	6.1	The research hypothesis	204
	6.2	Origins of the research	205
	6.3	Limitations of the research	206
	6.4	The development of effective leadership in schools facing Challenging circumstances – implications of the research	
	6.5	Recommendations	209
	6.6	Final Conclusion	210
C1 4 -	7 D		212
Cnapte	er / – Re	<u>eferences</u>	212
Chapte	er 8 – Aj	<u>ppendices</u>	225
A)	Pen po	ortraits of the schools participating in the research.	
B)	Reliab	oility – Cronbach's Alpha	
C)	(US) D	Descriptive Statistics for MLQ 5X 2004 Normative Sample	

- D) Descriptive Statistics Statement Variables
- E) Frequency Tables and Chi-square Tests
- F) License Agreement Mind Garden Inc.

# Leading the Teaching and Learning - A study of transformational leadership in secondary schools facing challenging circumstances.

#### **Chapter 1 - INTRODUCTION**

#### 1.1 The Purpose of the Thesis

This introduction outlines the purpose of the research into schools facing challenging circumstances, giving a clear indication of where the research focus lies as well as containing the reasons for doing the study. It outlines the issues surrounding headteacher leadership in challenging schools and adopts the hypothesis that headteachers with strong transformational leadership behaviours are more effective in raising standards of student attainment within a challenging school context than headteachers with other types of leadership behaviour. The thesis focus is original as few educational studies link headteacher leadership behaviours to measurements of student attainment and none have been done on schools within the English education system that are officially designated to be facing challenging circumstances.

Included in the introduction are key definitions and characteristics of schools facing challenging circumstances, key research questions, the theoretical framework and an indication of the study's limitations and constraints.

#### 1.2 Rationale and Context

#### 1.2 (a) Schools Facing Challenging Circumstances

This research proposal is centred on secondary schools deemed to be facing challenging circumstances. Secondary schools that the Department For Children, Schools and Families (DCSF) considers to be in circumstances that can be deemed challenging are those that have 25% or fewer of the pupils achieving five or more grades at GCSE of A\* - C or schools with more than 35% of their pupils on free school meals.

Often these schools tend to serve communities with high levels of economic and social deprivation and low levels of parent education. In addition, they also have some or many of the following characteristics:-

poor management

budget deficit

unsatisfactory buildings

staffing problems

contain a high proportion of pupils with additional needs,

contain pupils with low prior attainment, poor motivation and low self-esteem,

have a high proportion of transient pupils,

high rates of unauthorised absence

low levels of parent involvement

have a large percentage of pupils speaking languages other than English,

have a past reputation that has made it difficult to maintain pupil numbers.

Gray et al (1999) in outlining challenging circumstances considered that these schools have been characterised by low staff morale, general developmental apathy, and low levels of pupil performance. For Gray et al, improvement from such a baseline represents a formidable challenge (Gray et al, 1999, p. 73).

Nearly all schools facing challenging circumstances, therefore, populate the bottom of the published performance league tables in terms of GCSE outcomes. However, some of these schools have been able to make a significant movement up the league tables despite the continued challenges still facing them. Most of these schools are not deemed to be failing, nor have they been served any formal notice to improve by OFSTED. In 2003, 435 out of the 494 secondary schools identified in this category were making at least satisfactory progress, whilst nearly one-third were deemed to be making at least good progress (HMI, 2003).

The financial and external support for these schools over the last ten years has been significant with additional inputs coming from such initiatives as Education Action

Zones (EAZs), Excellence in Cities (EIC) and Leadership Incentive Grants (LIG) to provide the additional resources often cited as necessary to move a school forward.

#### 1.2(b) Need for Effective Leadership

Much of the published research literature (for example, Edmonds, 1979; Day, Harris & Hadfield 2001; Hopkins 2001; Gray et al 1999) emphasis the need for strong leadership. However, as Ansell (2004) comments for headteachers leading schools facing challenging circumstances the leadership challenges are disportionately hard (Ansell, 2004, p. 1).

Harris and Chapman (2002) consider the effective leader of a school facing challenging circumstances to be one that is pragmatic and resilient, yet above all, is able to convince others that their vision is worth sharing and pursuing.

An effective headteacher leads up an effective school. An effective school can be defined as one that achieves greater student learning than might have been predicted from the context in which it works:-

"students progress further than might be expected from consideration of its intake" (Mortimore, 1991, p. 4).

Stoll and Fink (1996) expand upon student learning, claiming that an effective school is not only about academic outcomes but also about caring. This caring not only provides the moral reasoning behind the change and adds the ethic inviting all stakeholders to join in, contribute and persevere on the change journey.

An effective leader should be able to significantly influence the conditions in a school that bring about school improvement and add value to their student outcomes.

Sammons, Hillman and Mortimore (1995) in their review of the school improvement literature identified at least 11 characteristics that are present in schools that add value to their students. They were:-

shared vision and goals
a learning environment
concentration on teaching and learning
purposeful teaching
high expectations
positive reinforcement
monitoring progress
pupils rights and responsibilities
home-school partnership
a learning organisation

Whilst acknowledging the contribution made by other factors such as those outlined above, this research proposal focuses upon the behaviour characteristics of the headteachers as strong effective leadership which can positively influence all of the above characteristics.

The purpose of this research, therefore, is to consider the relative effectiveness of the leadership in schools facing challenging circumstances in terms of raising student attainment.

If the leadership and management of most of these challenging schools is judged by OFSTED to be at least satisfactory, why is it that some schools can raise standards of attainment more than others?

Are there any common characteristics about the leaders in these faster moving 'improving' schools that suggest the predominance of a style of operating that may be more effective than another?

The behaviour characteristics associated with strong leadership and the ability to drive schools forward tend to be those associated, in some degree, with 'transformational leadership' (for example, Reynolds et al 2001; Harris & Chapman 2002; Hallinger & Heck 1996; Leithwood and Jantzi 1996, 1999, 2005).

Successful leadership of schools within the English education system has become identified with headteachers who have the skills and qualities to enable them to 'transform' the organisation into a more effective structure. 'Transform' means to change completely the shape of a character or a structure.

The idea of 'transformational leadership' was first developed by James McGregor Burns (1978) and extended by Bernard Bass (1985) and others. Neither Burns nor Bass studied schools but based their work on political leaders, army officers or business leaders. Burns argued that transforming leadership

'occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality'. (Burns 1978, p. 20)

Transformational leadership models have replaced, in terms of popularity, the instructional leadership models which were advocated within educational management discussions in the 1980s. Instructional leadership is concentrated on classroom management. Headteachers direct curriculum planning and teaching by instructing and guidance. This leadership model asks headteachers to monitor closely teachers' activities in order to assure the relationship between teaching and its outcomes.

The Hay Group (June 2000) in its report for the National College of School Leadership (NCSL) on 'Raising Achievement in Our Schools' identifies the highly effective headteacher as providing transformational leadership. Transformational leaders are able to work with their governing bodies and through their leadership teams to generate team working at all levels by seeking and valuing the inputs of others. Hay McBer characterise the highly effective transformational headteacher as having a high understanding of others that allows them to make best use of the strengths of the teams, enabling them to develop potential and deploy the totality of their human and physical resources to best effect (Hay Group, June 2000, p. 6).

The NCSL view is one of the transformational leader positively impacting upon school examination results.

'We know that good headteachers make a difference. There is a clear link between the quality of leadership, the quality of teaching and the achievement of pupils' (OFSTED 2001, p. 1).

This view supporting the DFEE (1998) statement that leaders with the appropriate training can motivate both teachers and students to achieve rigorous and challenging targets thereby transforming their schools and liberating the next generation from disadvantage (DFEE 1998, p. 7).

As studies into effectiveness have shown, schools in similar contexts with similar backgrounds develop at different rates. This project reviews headteachers working in challenging circumstances that have had some success in raising standards of attainment and compare their styles of leadership with another group of headteachers in similar circumstances who have not been able to raise standards of attainment at the same pace. All the headteachers in the survey have had their leadership positively endorsed by an OFSTED inspection and lead up secondary schools outside of any other special category of concern (for example, Special Measures). The research focuses in upon leadership characteristics; in particular, the transformational behaviours necessary of a school leader to support improvement. By contrasting headteachers in the two different types of challenging circumstance, the thesis research is an attempt to measure, whether there is any correlation between the strength of transformational characteristics and school improvement as identified by published performance data of student attainment.

As a practicing headteacher who has worked in two schools deemed to be in challenging circumstances the research is of great importance to me. More recently, I have taken over a school that had been placed in special measures. This experience has made me acutely aware of the expectations and the need for strong leadership to move a school forward very quickly. In so doing, this experience has highlighted the importance of context to this study. The style of leadership required to move a failing school forward quickly is not necessarily the style of leadership required to sustain the improvement looked for in most schools facing challenging circumstances. As schools progress along a journey of improvement, leadership styles may be different or need to change.

#### **1.3 Limitations and Constraints**

By focusing exclusively upon the leadership behaviours of headteachers in eight schools deemed to be facing challenging circumstances, the study is limited. It does not consider other factors that may also impact significantly upon moving a school facing challenging circumstances forward (for example, the strength of classroom conditions on student outcomes). It does, however, attempt to consider the leader's strength of influence on these other factors that, in turn, directly impact upon student outcomes.

Its evidence base is also limited coming exclusively from headteachers and their teaching staff and not from other stakeholders such as other colleagues, parents, governors, community members and the Local Authority. Neither does it consider the views of students, although it considers student outcomes as measured in terms of GCSE grades and cumulative value added (CVA) scores.

A quantitative approach has been adopted supplemented by DFES reports and data to explore the effectiveness of the different headteacher styles of leadership.

The outcomes of the study provide more information with regard to the strengths of leadership behaviours most likely to move a school facing challenging circumstances forward quickly.

#### 1.4 Study Summary

#### 1.4 (a) Literature Review

Chapter two starts by reviewing the literature with regard to transformational leadership behaviours. The chapter focuses upon relevant research into leadership behaviours within educational establishments worldwide. Research into the impact of these behaviours on school and classroom conditions is evaluated with a view to assessing the effect such behaviours can have upon student outcomes. Finally, the reviews are applied to the existing school improvement research data on schools facing challenging circumstances within England. It concludes by providing a list of criteria designed to

inform the analysis and suggests headteacher leadership practice that may be effective in challenging school environments.

#### 1.4 (b) Methodology.

The third chapter reviews and justifies the methodological approach taken by the study and the assumptions made. It considers the data collection techniques to be used and the data collection process. In addition, issues around the piloting of the study, the choice of sample, data collection and data recording are also considered. Finally, it reviews how the results are to be presented. Throughout the chapter issues of validity and reliability are addressed.

#### 1.4 (c) Findings

Chapter four is a presentation of the research describing any significant findings as related to the transformational, transactional and laissez-faire leadership styles of the headteachers in the study. It has a focus upon teacher perceptions of those styles and considers the relative strengths of all the headteachers. Issues of consistency of approach and comparison across individual and groups of school are considered.

#### 1.4 (d) Discussion

The findings and the analysis of those findings are intended to be both original, and demonstrate a critical awareness of the current issues and provide support for any proposed model. The analysis of the findings are discussed and compared and contrasted with existing data and conceptual frameworks. The analysis tests the extent to which the data relates to conceptual models. The central focus of this analysis section is that it relates the research data to the conceptual framework developed in the literature review and then attempts to draw reliable conclusions.

#### 1.4 (e) Conclusion

The final chapter summarises the principle features of the study. The conclusions provide additional insight into the key questions asked, and consider where the

discussion may fruitfully move onto. The penultimate section of the conclusion allows for a reflection of the study's implications and the final section is a list of specific and practical suggestions arising from those implications.

#### 1.5 Key Questions

This research project, therefore, intends to analyse the characteristics of leaders in schools facing challenging schools, and seeks to explore the differences in leadership style between groups of 'slower' and 'faster' achieving schools (as defined in terms of GCSE success). The key questions of this research are as follows:-

What are the effective leadership skills and qualities of headteachers in schools facing challenging circumstances?

Can any assessment of their influence, relative to student attainment, be considered?

Do those skills and qualities match those of a transformational leader?

Can a set of behaviours be identified as a model for similar schools facing challenging circumstances?

# Leading the Teaching and Learning - A study of transformational leadership in secondary schools facing challenging circumstances.

#### Chapter 2 – A REVIEW OF THE RESEARCH LITERATURE

#### 2.1 Introduction

This chapter reviews the literature with regard to transformational leadership behaviours. It focuses upon relevant research into leadership behaviours within educational establishments worldwide. Research into the impact of these behaviours on school and classroom conditions is evaluated with a view to assessing the effect such behaviours can have upon student outcomes. Finally, the reviews are applied to the existing school improvement research data on schools facing challenging circumstances within England. The chapter concludes by providing a list of criteria designed to inform the analysis and suggests a model of leadership practice.

#### 2.2 Leadership and transformational leadership behaviours

This study researches into the effective leadership styles of headteachers in schools facing challenging circumstances. It takes, as its starting point, the view that headteacher transformational leadership behaviours are a necessary prerequisite for whole school improvement.

Leadership in schools is not a new area of research. However, schools now operate much more as self-managing organisations than use to be the case, with headteachers no longer just the administrators and managers of a wider local education authority structure. Now the headteachers' focus is much more on strategy, planning, complex processes and accountability. Resulting from this evolution has been a need for strong leadership. The role and performance of individual headteachers, has become critical to schools as, in this self-managing environment, they successfully strive to serve the needs of their client groups.

Drucker (1985) defines leadership as

'the lifting of people's vision to a higher sight, the raising of their performance to a higher standard, the building of their personality beyond its normal limitations' (Drucker 1985, p. 5)

Burns (1978) describes a process whereby leaders and followers engage in raising one another to higher levels of morality and motivation. Ultimately, all definitions involve the exercise of influence, direction, support, discipline and care over others.

The Department for Education and Skills emphasises the key outcomes of successful leadership from headteachers as being about:-

- the creation of a positive ethos in a school, creating/maintaining a productive, disciplined learning environment;
- ensuring all teachers perform to the best of their ability in the pursuit of higher standards;
- ensuring effective and efficient use of the whole resource base of the school,
   human, financial and physical;
- securing commitment of the wider community. (National Standards for Headteachers, 2004)

For the DFES, to be effective in delivering these outcomes it requires the headteacher to provide transformational leadership.

'Priority one is to ensure that every secondary head has the ambition, the skills and the tools to transform their school.' (DFES 2002, p. 15)

As previously stated, 'transform' means to completely change the shape of a character or a structure. Successful leadership of schools within the English education system, therefore, has become identified with headteachers who have the skills and qualities to enable them to completely change the school organisation into a more effective structure.

Caldwell (2004), comments that the challenge faced by school leaders in the 21<sup>st</sup> Century is to lead the transformation of learning. This transformation is change that, in challenging situations, is significant, systematic and sustained. He considers the result

of this transformation to be higher levels of success for students that, in turn, a lead to more positive contributions to the nation as a whole.

The concept of transformational leadership was developed by James McGregor Burns (1978) after studying Weber's (1947) work on transactional and transformational leadership authority. Burns developed Weber's notion of the 'Charismatic Hero' as one of a transformer. Weber considered that charisma set ordinary people apart from each other. Those with charisma have exceptional powers and/or qualities that enable them to be seen and treated as leaders.

Howell (1997) suggests that there is common agreement between writers on leadership, that in times of instability, crisis and turmoil, charismatic leaders emerge. Any challenging situation increases the chances that helpless, agitated, anxious and frustrated people will accept authority, particularly of charismatic leaders who appear to have the qualities to lead them away from their current distress. Conger and Kanungo (1987) believe that it is the members of the organisation that attribute charisma to those in leadership positions. Charisma is, therefore, not dependent upon outcome, but upon the actions taken by a leader. This leader is primarily concerned with influencing followers to accept and own a vision and encouraging of all to work together towards it. In a school context, Novak (2002) saw the construction of a shared hopeful vision, an ability to articulate that vision and an enrolling of participants in extending that vision as vital leadership skills if schools are to progress. The leader uses strategies and techniques to make followers participate and feel empowered. Conger and Kanungo (1998) argue that the empowerment of followers in this way can result in transformational effects.

For Burns (1978), the charismatic hero/leader was identified as having morals and as wishing to return to the fundamental wants and needs, aspirations and values of their followers. This relationship with their followers was not only based on power, but also on mutual needs, aspirations and values. The transformational leader

'recognises and exploits an existing need or demand of a potential follower... (and) looks for potential motives in followers, seeks to satisfy higher needs, and engages the full person of the follower' (Burns 1978, p4).

Burns (1978) suggested that followers are central to leadership because a) they are significantly involved in the negotiations central to the transactions of power and b) they have minds of their own.

This was in contrast to the transactional leader who approaches followers with a view to exchange or barter. For example, jobs for votes, or subsidies for campaign contributions. The transactional leader is seen to require an eye for opportunity and needs to be able to hold a good hand for bargaining. Bernard Bass (1985) developed the model further. He saw the transactional leader as pursuing a cost-benefit economic exchange to meet subordinates current material and psychic needs in return for 'contracted' services. It involves leaders clarifying goals and objectives, communicating to organise tasks and activities with the co-operation of their employees to ensure that wider organisational goals are met. For such a relationship to be successful, it depends on hierarchy and the ability to work through this mode of exchange. It requires leadership skills such as the ability to obtain results, to control through structures and processes, to solve problems, to plan and organise, and work within the structures and boundaries of the organisation.

In addition to transformational and transactional leadership Bass and Avolio (1994) also identify laissez-faire or passive avoidant leadership. This style of leadership behaviour exhibits a laid back indifference to tasks and to subordinates. Punishments and other corrective actions ensue when followers deviate from performance standards. Leaders who rate high for passive-avoidant leadership are most likely to exhibit conservative strategies characterised by low levels of proactivity and innovation, and tend to be largely ineffective.

Bass (1985) cited Burns (1978) definition of the transformational leader as one that recognised the transactional needs in potential followers, but went further in seeking to arouse and satisfy higher needs, to engage the full person. Those higher needs being those identified according to Maslow's (1957) hierarchy of needs. Bass (1997) argued that transformational leadership is universally applicable regardless of culture. They can transcend their own self-interests for the good of the group and motivate the group to use up further energy than would usually have been expected.

Chapter 3 outlines in more detail the methods used by Bass (1985) to determine leadership behaviours. This study assesses headteachers against these behaviours by the use of an adapted questionnaire developed by Bass and Avolio (1994) to determine leadership styles.

Bass (1985) outlines transformational leaders as people able to articulate a compelling vision of the future. They are able to use stories and symbols to communicate their vision. They can communicate the importance of having a collective mission and sense of purpose and talk optimistically about the organisation attaining their goals. They can engender trust and respect from their followers and instil pride in them. They talk about their most important values and beliefs and consider the moral and ethical consequences of decisions. They seek different perspectives when solving problems and get followers to challenge old assumptions. They spend time coaching and teaching. They also consider each individual follower's needs, abilities and aspirations as well as being compassionate, appreciate and responsive towards them.

Bass (1997) also argues that most leaders do both transformation and transaction in different amounts and intensities. Transformational leadership, however, is hierarchically superior to transactional leadership as it is able to expand the subordinate's needs with a focus upon the more transcendental whilst the transactional leader appeals to those lower order needs as identified by Maslow (1957).

Another important difference from transactional leadership is that transformational leadership is devolved/distributed and not focused upon one person. A transformational leader will have other transformational leaders within the organisation whereas the transactional leader tends to act alone.

#### 2.3 The Evolution of Transformational Leadership Behaviours within Schools

Neither Burns (1978) nor Bass (1997) specifically considered educational leadership, as the concepts were originally based on studies of business executives, officers within the armed services and political leaders. There is no unitary concept of transformational leadership within education (Leithwood & Jantzi 1996; Southworth 2001; West,

Ainscow & Stanford 2005). Nonetheless, as Hallinger (2003) comments, transformational leadership is an extremely popular image of ideal practice in schools at the present time.

In 1998, the DFEE commented that leaders with appropriate training in recommended techniques can motivate teachers and students to achieve rigorous and challenging targets as well as transform their schools and liberate the next generation from disadvantage. (DFEE, 1998). The role of the National College for School Leadership in promoting the model for aspiring and existing headteachers is, in part, responsible for it's popularity. Based upon the Hay McBer Group Report (2000), the NCSL identified the transformational headteacher as having a good knowledge of others within the organisation and that this allowed them to make best use of the strengths of their teams. Hopkins, 2001, comments that headteachers are expected to produce a genuine transformation in 'feelings, attitudes and beliefs' within schools (Hopkins 2001, p. 2).

As outlined, transformational leadership challenges the notion of leadership as reflected in a person who takes charge and gets tasks accomplished. Mitchell and Tucker (1992) commented that by focusing upon the headteacher as a leader who needs to take charge and get things done we are prevented from focusing upon the importance of teamwork in schools and, from focusing upon comprehensive school improvement.

Leithwood and Jantzi (1994) adapted and developed Bass's (1985) model of transformational leadership for educational settings. Leithwood and Jantzi (1994) accepted Burns (1978) claim that transformational leadership goes beyond the self-interest by both leader and led. Leithwood and Jantzi (1994) took Bass's (1985) model and modified it so that transactional and transformational leadership represented the opposite ends of a leadership continuum. Leithwood and Jantzi (1994) has been critical of the application of Bass's (1985) model to schools as there is no or little consideration within these studies of the uniqueness of them as an organisation. Whilst all organisations share some common features, Leithwood and Jantzi (1994) saw schools to have unique goals, unusually committed employees, and porous boundaries. Thomas Sergiovanni (1994) develops a similar theme arguing that schools need to be seen more as communities than organisations.

"...the theories of management, organization, motivation, and control that make sense for some kinds of collectivities do not make sense for others. Good leadership for corporations and other organizations, it appears, may not be good leadership for churches, neighbourhood associations, families, and other social enterprises. Schools should be treated as special cases because they serve as transitional places for children." (Sergiovanni 1994, p214)

As a result of such concerns, Leithwood, Jantzi & Steinbach (1999a) further refined a model for school organisations that recognized the transactional dimension. They argued that most models of transformational leadership were flawed by their under representation of transactional practices. They saw such transactional practices to be managerial in nature and, as such, were essential to ensuring organizational stability. Bass (1985) had argued that both transactional and transformational practices could be complimentary.

Eden's (1998) study into leadership in a large Israeli secondary school saw transformational leadership as being relatively successful when transactional practices were also incorporated in such a way that they remained sensitive to the teachers who accepted them. For Eden (1998) both leadership styles are interwoven and are seen as vital for the resolution of the paradox (set routines and bureaucracy v developing new relationships and setting new goals) that school leaders face.

Leithwood (2004) identified the factors that made up transformational and transactional leadership in schools as being the building of school vision, the establishment of school goals, demonstrating high performance expectations, providing intellectual stimulation, offering individual support, modelling best practice and important organisational goals, creating a productive school culture and developing communication systems to encourage participation in the school decision making process.

Leithwood and Jantzi (1996) argue that transformational leadership is well suited to the challenges of current school needs to restructure. It has the potential for building high levels of commitment in teachers to the complicated and uncertain nature of the school reform agenda. It also offers the potential to foster growth and develop teachers' capabilities to respond to these agendas in a positive way.

An important distinction between transformational and transactional leadership is in the way that leadership achieves its desired effect. Transactional and instructional leadership target only first-order variables in the change process. Leithwood, Jantzi & Steinbach (1999a) define instructional leadership as that which

'assumes that the critical focus for attention by leaders is the behaviour of teachers as they engage in activities directly affecting the growth of students'. (Leithwood, Jantzi & Steinbach, 1999a, p. 84)

These forms of leadership only seek to influence school conditions that directly impact upon the classroom practice (for example – the employment of teachers).

Transformational leadership also seeks to create second-order changes, for example they seek to ensure teachers sustain their own professional development, or influence the teacher's classroom environment so as to raise student attainment. These changes are second-order as a result of the headteacher creating the conditions under which others are committed and self-motivated to work towards improvement without specific direction. As highlighted later, some researchers (Mulford & Silins, 2003; Leithwood and Jantzi, 1999b) have attempted to measure the degree by which these second-order changes can be influenced.

At the centre of school based reform is the commitment of the staff, particularly the teaching staff, to change. Leadership behaviours must be capable of influencing teachers' commitment to change. Commitment to change was conceptualised as the functional equivalent of motivation (Ford 1992). Personal goals, teachers' belief in themselves to achieve these goals, confidence in whether the institution can deliver and a supportive emotional climate all have to be positively influenced by the leadership if change is to be effective. Leaders in schools with transformational leadership behaviours are seen as best placed to acquire the necessary teacher commitment, and, therefore, placed at the centre of this study into schools facing challenging circumstances.

To bring about this necessary teacher commitment, Leithwood and Jantzi (1996) identified three broad categories of successful leadership practices. They were 'setting

directions,' 'redesigning the organization,' and 'developing people'. (Conger and Kanungo, 1998, speak about 'visioning strategies,' 'efficacy-building strategies,' and 'context changing strategies.) Yukl (2001) identifies transformational leadership as the approach to make events meaningful, enables employee capacity to be developed and leads to higher levels of personal commitment towards the achievement of organisational goals on the part of the leaders' colleagues.

The educational research into these three leadership practices is now considered in more detail.

#### 2.4 Setting Directions

2.4 (a) Vision

Nanus (1992) states that

'there is no more powerful engine driving an organisation toward excellence and long range success than an attractive worthwhile vision of the future, widely shared'. (Nanus, 1992, p. 3).

Conger and Kanungo's (1987) definition of vision states that it

'refers to an idealised goal that the leaders want the organisation to achieve in the future'. (Conger and Kanungo, 1987, p. 640).

Bryman (1992) identified vision as being the primary source of charisma. It is the development and articulation of that vision that inspires and motivates others.

In schools, that means that to influence teacher actions they all individually need to subscribe to the vision. Geijsel, Sleegers, & Van den Berg (1999) study into Canadian and Dutch teachers' commitment to towards school reform states that joint vision only exists when teachers participate in the creation and maintenance of the school's vision. Barnett and McCormick (2003) in their transformational leadership study of behaviour and vision within four schools concluded that leadership in schools is characterised by

relationships with individuals. Through these relationships a leader is able to establish leadership and encourage teachers to apply their expertise and efforts towards their shared purpose. Barnett and McCormick (2003) considered visionary leadership as a two-stage process. One is the development of the vision, and secondly is the communication of it. Geijsel, Sleegers, & Van den Berg (1999) commented that if the teachers experience vision, individual consideration and intellectual stimulation then impact on teaching practices can be expected.

Leithwood and Jantzi have undertaken some of the most significant research in this area in a series of studies dating back to 1994. Leithwood and Jantzi (1997) analysed responses from over 1000 teachers in 115 elementary and secondary schools in Ontario to test what factors influence teachers to attribute leadership qualities to their principals.

This research has significance for this study as it also invited teachers to assess the leadership qualities of the headteachers and, again, the methodology underpinning the research is discussed in greater detail in Chapter 3.

Leithwood and Jantzi (1997) found that by doing positive work on behalf of one's school, and by being seen to do such work, is likely to be the most powerful strategy for positively influencing teachers' perceptions of principal/headteacher leadership. The visible contribution towards developing the school's mission and goals, culture, structure and organisation, policies and procedures were all seen as displaying transformational leadership qualities.

Conger (1989) found that there could be negative outcomes for the leader with regard to vision. Vision was a problem if the leadership made exaggerated claims about the vision. It was also a problem if the resources to support the vision were underestimated. In a school setting, Licata and Harper (2001) suggested that even if leadership and teachers work together on the development of a school vision, it does not always lead to the vision being internalised and can lack the actions needed to make it a reality. Eden (1998) sees leadership as emerging when the leader manages to impose their meaning on their school organisation in a way that is sensible to the led. Uniformity of vision is unusual with some followers still inclined to 'rebel'. For Eden (1998), the rebellious minority can help legitimise the leader's power, being too small a

group to influence the vision but noticeable to the extent that the leader can be viewed as democratic.

Despite only considering four schools, Barnett and McCormick (2003) were able to drawn several conclusions centred upon school vision. First, vision was an important transformational leadership behaviour that gave direction and purpose. Secondly, they moved away from the Bass and Avolio (1997) assumption that it is just the leader who articulates a vision that motivates and inspires followers. Their study demonstrated that the vision must reflect the needs, interests and values of the whole school community. There has to be some reason to motivate followers otherwise it may be viewed as wishful thinking. This view is supported by Pawar and Eastman (1997). They considered that the inspirational strength of a vision depends upon the degree to which it can be seen to reflect the interests of the organisation and its employees. Thirdly, Barnett and McCormick (2003) considered that vision, on its own, was not enough to influence what most teachers did. In three of the case study schools there had been collaborative processes leading to a shared vision, but in no case did it lead to any questioning or development of learning and teaching practices.

#### 2.4 (b) Goal Setting

Hallinger and Heck (2002) considered that an essential role of leadership was to help develop a shared understanding within the group so that each could identify with a common vision and sense of purpose. Marks and Louis (1999) view shared commitment and school wide collaboration as critical if the school is to develop as a learning organisation. Leithwood et al's (2004) study of the National Literacy and Numeracy Strategies in England demonstrated that by the setting of goals that the group found challenging but achievable, it helped them to make sense of their work. With the same goals to be aimed at, it gave the group a sense of shared identity within their work place. This viewpoint is supported by Weick (2001) who talks of setting direction by 'means of a compass rather than a map' in a world that is unknowable and unpredictable. He considers that a compass makes it clearer that direction, rather than location, is what will assist people in determining the process that needs to be undertaken. He argues that the effective leader is one who helps others make sense of what they are facing.

Barnett, McCormick and Conners (2000) in their review of the literature into school leaders, teacher outcomes and culture suggest that in schools task focused goals are preferable to performance focused goals. A task focused goal is centred upon the belief that effort leads to success and that there is an intrinsic value to learning. It is about the student developing new skills, understanding new ways of learning and trying to reach a deeper understanding of the issues. This contrasts with performance focused goals that are centred on the belief that the aim of learning is to 'do better' than others by surpassing norms and targets. Barnett, McCormick and Conners (2000) comment that given a choice, teachers will focus upon task focused goals rather than performance goals. Given the expectations placed upon schools to achieve performance, there is a crucial role to be played by headteachers and principals. Leithwood and Jantzi (1997) believe that it is the headteacher displaying transformational leadership behaviours that is best placed to direct teachers towards performance. They comment that the transformational approach builds trust, respect and a willingness on the part of teachers to work collectively towards those goals.

As Eden's (1998) Israeli education study demonstrates, achieving consensus in terms of setting goals can be achieved in other ways. He comments that the effective leader is able to manipulate the goal setting process and asserts that school leaders need to exert influence by using latent strategies to legitimise the organisational goals. The headteacher/principal is similar to a political leader and uses the political scene as a stage to shape constituency needs and expectations. To this end they are using a mix of transformational and transactional behaviours.

#### 2.4 (c) Motivation

Leithwood and Jantzi (1996), Geijsel, Sleegers, & Van den Berg (1999) and Eyal and Kark (2004) were all able to evidence the motivational effects of transformational leadership behaviours. Teachers' attitudes towards innovations largely consist of concern. Clear consideration of teachers' needs and feelings as well as the development and clarification of a vision can make teachers more self-confident with regard to their own capabilities and less afraid of what is to come. Geijsel et al (2003) reported on the effects of transformational school leadership on the motivation of teachers to engage in school reform, and upon the efforts they were willing to commit to these reforms.

Leithwood et al (1999a) suggests that the teachers' commitment to change is an element of motivation. Both Leithwood et al (1999a) and Geijsel et al (2003) refer to the motivation theories of Bandura (1986) and Ford (1992).

Bandura (1986) comments that it is not enough for members of an organisation to have energising goals in mind. They must also believe themselves capable of accomplishing these goals.

'People who see themselves as capable or efficacious set themselves challenges that enlist their interest and involvement in activities; they intensify their efforts when their performances fall short of their goals, make causal ascription for failures that support a success orientation, approach potentially threatening tasks non-anxiously, and experience little in the way of stress reactions in taxing situations. Such self- assured endeavour produces accomplishments.' Bandura (1986, p. 395)

Ford (1992) views motivational processes as being focused on the future and aimed at helping the person to evaluate the need for change or action. Geijsel, Sleegers, & Van den Berg (1999)) large scale study into Canadian and Dutch secondary schools evaluated the impact of all three of the core dimensions (Leithwood, Jantzi & Steinbach 1999a) of transformational leadership (Setting direction, developing people and redesigning the organisation) upon teacher motivation. Geijsel, Sleegers, & Van den Berg (1999) indicated, however, that transformational leadership behaviours only had modest effects on a teachers' commitment to change. Vision building appeared to be the only dimension that significantly influenced personal goals and motivation. Individualised staff consideration was demonstrated to have the weakest impact upon motivation. Yukl (2001) notes that this may be because of the partly ambiguous nature of this dimension (i.e. Developing People). Within the organisation this can be translated into both developmental considerations (coaching, mentoring) and support (respect, concern, appreciation). Yukl (2001) concludes that it is the developmental part of this dimension that has the greatest impact upon motivation. The supporting part of the dimension impacts upon the followers' satisfaction with the leader but not necessarily upon motivation.

#### 2.4 (d) Values and the Expectation of High Performance

Similar to this research study, Day, Harris and Hadfield (2000) undertook a 360-degree perspective on headship by interviewing all the stakeholders who came into direct contact with leadership across 12 English schools. The research considers how existing theories of effective leadership match up to the practice of successful headteachers in times of change. Acknowledging the studies of others into school leaders and their values, they wanted to add to the little amount of empirical data that exists by examining the extent to which such values are being applied and impacting upon their stakeholders. The analysis revealed that although headteachers were at different stages in their careers and working in very different contexts, there were a core set of characteristics that they possessed and used to manage a broadly similar set of tensions and dilemmas. In their findings they believe headteachers to be ruthless in their establishment of high expectations. This meant a continuing pressure on self and others for improvement, and this was based, not on external pressures, but upon existing intrinsic values.

#### 2.5 Redesigning the Organisation

To successfully redesign the organisation the effective headteacher needs to modify the school's organisational structure; build collaborative processes; and build productive relations with the parents and other community stakeholders. This can only be achieved if the headteacher and leadership are effective at modifying and strengthening the school culture.

All schools differ from one another in the way they work, as well as in the effects that they have on the lives of their students. Barth (2002) comments that a school's culture has a far greater influence on the learning and life of a school than any politician, any educational leader at any level, any staff member or any parent can ever have. No one person can change the culture. Only by inviting others to join them can leaders start to change the school culture.

The development of a shared vision and shared goals form the starting points from which the culture can be modified. Each school is different and within each are a

variety of beliefs, goals, purposes, thoughts, knowledge and expectations that come together to form a unique culture. Schools define teaching and learning in different ways and this, in turn, results in each institution having a different impact than another on motivation and student learning. Stolp and Smith (1995) comment that a positive school culture is associated with higher student motivation and achievement, improved teacher collaboration, and improved attitudes of teachers towards doing their job. Barnett, McCormick and Conners (2000) in their study of leadership behaviours of school principals, teacher outcomes and school culture state that school culture does not exist in a vacuum. Crucial to its creation and maintenance are the leadership practices of the school principal.

Barnett and McCormick (2003) concluded that building relationships with teachers and staff within the school was central to the leadership in their study. It was through those relationships that they were able to maintain leader legitimacy and encourage commitment and effort towards achieving their shared vision. In their earlier study of 41 South Australian secondary schools, Barnett, McCormack and Conners (2000) concluded that leaders do not have a relationship with teachers as a total group. They have a set of relationships that vary from one teacher or follower to another. Yukl (2001) suggests that leadership and 'followership' are interdependent and that the leader's legitimacy depends on their standing with these followers. The ability of the leader to lead, therefore, is dependent upon their behaviour being recognised and acknowledged by others. Barnett et al (2000) believe that this emphasis has been overlooked in most leadership theories. They comment that the notion of the follower 'consent to leadership' is particularly important in schools that have properties of looseness in their structural couplings. Given teacher autonomy in the classroom and the view of themselves as 'professionals' there is a limit to the capacity of headteachers to meaningfully influence them. Greenfield (1991) states that the reality is that if teachers are going to be influenced by leadership of a principal it is by choice they consent to the leadership and are willing to be led.

Leithwood and Jantzi (1997) considered the factors that influence teachers to attribute leadership qualities to their principals. This study used survey evidence from 420 teachers in British Columbia. Arising from their results was the assertion that it is what you do (actions) rather than who you are that matters to teachers. Visibly contributing to

each of the school dimensions in ways that teachers find helpful is likely to result in teachers interpreting these actions as transformational. These characteristics are more likely to lead to teacher's giving their consent to be led. Barnett et al (2000) concluded that that consent was directly linked to the principal/headteacher showing individual concern for the follower. Their study identified that transformational behaviours that led to individual concern being shown were more likely to result in the teacher putting in extra effort, gaining more job satisfaction and helped them become more effective in terms of achieving performance focused goals. They questioned Nanus's (1992) view on vision being the 'power engine', concluding that in their study it only had an indirect effect on teacher outcomes. The evidence from their study suggest that the transformational leadership behaviour individual concern is a critical leadership task as it builds the capacity of teachers to identify with and share in the development of a new evolving culture.

#### **2.6 Developing People**

For Harris and Chapman (2002), one common theme of their investigation into 10 schools facing challenging circumstances was the focus of effective leadership upon the people they worked with, and the need to support their professional development. They found that the headteacher practice was underpinned by a set of personal and professional values that put people before the needs of the organisation.

Barker's (2005) 'Hillside' study provides further evidence of the importance of interpersonal skills. The teachers had seen the lack of school progress due, in part, to limited personal resource management and a mainly coercive style on the part of the outgoing headteacher. This had resulted in a predominately negative and unproductive climate.

Day et al (2000) concluded that the vision and practices of the headteachers in their study were underpinned by a number of core personal values. These values centred on the modelling and promotion of respect for individuals. There was a strong feeling of the need for fairness and equality; for caring for students and staff and ensuring their development. They believed that it was clear that leadership actions on which their

values and visions were based were primarily moral, dedicated to the welfare of staff and students.

'Ever present in the actions of the headteachers in the study was a strong sense of integrity related to their core values, their sense of caring, their belief in staff as the key to successful improvement efforts and in particular the importance which they attached to building self-esteem and restoring self-confidence. This was very clearly linked to the issue of staff development and the role the headteacher placed on maximising the staffs' potential' (Day et al, 2000, p. 7)

They commented that all heads in their study vigorously promoted all forms of staff development and that it was not just based upon needs that were of benefit to the school but also those which were of benefit to the individual. Collins 2006 also emphasises this viewpoint with a comment from an interview with a headteacher on social leadership.

'Leadership requires being clever for the greater good. In the end, it is my responsibility to ensure that the right decisions happen – even if I don't have the sole power to make those decisions, and even if those decisions could not win a popular vote. The only way I can achieve that is if people know that I'm motivated first and always for the greatness of our work, not myself.' (Collins, 2006, p. 11)

Harris and Chapman (2002) consider all headteachers to be active in intervening to promote capacity and growth. Their research in schools facing challenging circumstances found that the effective leaders were able to combine a moral purpose with a desire to collaborate and develop teamwork and that this included extending the boundaries of participation in leadership and decision-making.

Day et al (2000) highlighted the dilemma, however, between providing moral leadership, emphasising the development of their staff and establishing the need for improvement and high standards. Tensions arise when staff do not live up to expectations or when 'externally imposed' change needs to be implemented.

Nonetheless, most heads, they concluded remain committed to their staff and their development, and, as such, to the ongoing transformation of their school.

## 2.7 Transformational Leadership Effects on Student Outcomes

Harris (2004) acknowledges that there is an important blind spot in the research in determining what form/s of leadership practice contribute to sustained school improvement. Mulford and Silins (2003) comment that the link from leadership to organisational learning and student outcomes is a rare event in the educational leadership and school improvement research literature. Southworth (2002) is critical of some current commentators on leadership commenting that by taking a broad approach that encompasses issues such as whole-school cultural changes, they are neglecting to focus upon classroom practice. Hopkins (2001) also criticises transformational leadership because it lacks a specific orientation towards student learning. He feels that transformational leadership focuses upon the wrong variables.

Leithwood and Jantzi, (1996) considers that there is a small but compelling body of empirical evidence connecting principal/headteacher leadership practice with student outcomes. Hallinger and Heck (1996) comment that studies that inquire only about the direct effects of school leadership on student outcomes tend to report weak or inconclusive outcomes. Where the study includes the effects of leadership practice upon mediating and/or moderating variables that impact upon student outcomes the effect can be significant.

Mulford and Silins (2003) led up the Leadership for Organisational Learning and Student Outcomes (LOLSO) Research Project that was aimed at extending present understandings of how school reform initiatives change school practices and enhance student learning. The LOLSO Project was conducted over four years in Australian schools and involved four phases of data including surveys of 3500 Year 10 students, 2500 of their teachers and headteachers, cross-sectional and longitudinal case studies of best practice, and resurveys of students and teachers two years on (students then in Year 12). The project focused upon three areas, high school leadership, organisational learning and school outcomes, and the strength of the relationship between them. Two of the six research questions asked are of prime importance to this study.

They are 'what leadership practices promote organisational learning in schools, and 'do school leadership and/or organisational learning contribute to student outcomes? Their findings to these questions are explored and compared to this study in Chapter Five.

Senge (1990) defines learning organizations as institutions

'where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together'. (Senge 1990, p. 3)

Marks, Louis, & Printy, S (2000) have identified leadership as one of six dimensions that underpin a school's capacity for organisational learning. The others are the school structure, joint decision making based upon teacher empowerment, shared commitments, knowledge and skills, and feedback and accountability.

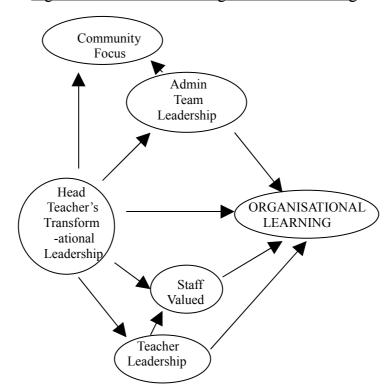


Figure 2.1 - Influences on Organisational Learning

Mulford, B. & Silins, H. (2003) p179

The LOLSO research clearly demonstrated that the predominant conditions accounting for variations in organisational learning between secondary schools were headteachers skilled in transformational leadership with their staff actively involved in the core work of the school. Individual support by the headteacher, development of culture, shared vision and goals, intellectual stimulation and performance expectation all featured strongly in those schools. As part of it, a school structure that promoted participative decision-making, supports delegation and distributive leadership and encouraged teacher autonomy for making decisions were all seen as important. Figure 2.1 above illustrates the LOLSO research by Mulford and Silins (2003) summarising the influences on organisational learning.

Leithwood, Jantzi and Steinbach's (1999a) study into Canadian high schools demonstrated the effects of transformational leadership on the school as a learning organisation. They concluded that transformational leadership behaviours had a strong direct effect on school conditions, which, in turn, had a strong effect on classroom conditions.

Yu (2002) carried out similar research to Leithwood, Jantzi and Steinbach's (1999a) Canadian studies in Hong Kong. Yu's (2002) study based upon the responses of nearly 3000 teachers from across 111 primary schools reported significant relationships between transformational leadership and school conditions. However, Yu (2002) also sought to explore the strength of the relationship between leadership and teacher' commitment. As outlined earlier, commitment to change by teachers was conceptualised as the functional equivalent of motivation (Ford 1992), and four components identified, personal goals, capacity beliefs, context beliefs and emotional arousal. When Yu (2002) treated these four components of teacher commitment as dependent measures, transformational leadership explained:-

- 7.4% of the variance in personal goals
- 9.6% of the variance in capacity beliefs
- 11.4% of the variance in context beliefs
- 4.1% of the variance in emotional arousal

This contrasts with other studies into the school as a learning organisation and also links with 'teacher efficacy'. Collective teacher efficacy is

'the perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students' (Goddard, Hoy, W & Hoy, A. 2000, p. 480).

Louis and Marks (1998) comment the collective teacher efficacy is more likely to increase if the shared vision is of a school committed to student and teacher learning. Although no study has considered the role of the principal in contributing to collective teacher efficacy, Ross, Hogaboam-Gray, & Gray (2004) believe that there is evidence that supportive principals, particular those displaying transformational leadership behaviours can contribute towards enhancing teacher efficacy.

'Principals are well-placed to set feasible goals and interpret achievement data as evidence of success and failure to meet these goals. Principals can also identify exemplars of successful team performance and make it easier....to observe each other, thereby providing opportunities to strengthen collective teacher efficacy through vicarious experience.' (Ross, Hogaboam-Gray, & Gray, 2004, p. 181)

As Griffith (2004) notes, the proposition that headteacher/principal behaviours have stronger relations to outcomes related to teacher performance than student attainment has intuitive appeal. Principals spend more time with their school staff by providing direction and guidance and assessing and providing needed resources. They observe and evaluate job performance. The staffs, themselves, are the ones in most contact with the students in the classroom. Again, this demonstrates that the transformational leadership on school conditions, such as goals, planning and structure will impact upon the classroom, but indirectly through the teachers' commitment and attitude.

Griffiths (2004) questioned in his study of elementary schools if principals displaying transformational leadership led schools with higher job satisfaction and lower teaching staff turnover. Using a structural equation model (SEM) to examine both direct and indirect effects, Griffith (2004) concluded that there were strong positive and significant relationships between transformational leadership behaviours and both job satisfaction and low staff turnover. Principals who included staff in the planning, problem solving and decision making processes of the school were the ones likely to be in schools with staff reporting greater job satisfaction, commitment and motivation. There was also

likely to be better communications, greater mutual trust, greater co-operation and collaboration.

Leithwood and Jantzi (1999b) sampled 1818 teachers and 6490 students in Ontario to explore the effects of leadership on student engagement. As Table 2.2 illustrates below, student engagement is a key component affecting student outcomes. Whilst Leithwood and Jantzi's (1999b) study demonstrates that transformational leadership practices impact strongly on organisational/school conditions, they are able to note a moderate, but still significant, effect upon student engagement. Table 2.2 illustrates that the family and community have the biggest effect on student engagement. However, the impact of Leadership is significant. Also, as the study demonstrated that leadership has a significant effect on school conditions, then additional leadership influence is indirectly asserted through this factor.

<u>Table 2.2 - Student Engagement in School.</u>

Total Effects	Student participation in school	Student identification with school
Family Leadership School Conditions Classroom Conditions	.69 .11 .17 .09	.70 .17 .24 .08

Leithwood and Jantzi (1999b, p. 466)

Leithwood and Jantzi's (1999b) study demonstrated that transformational leadership explained 77% of the variation in school conditions and that school conditions have a moderate, yet significant effect on both student participation (.17) and upon student identification with school (.24). Transformational leadership has a weak (.17) but statistically significant effect on student identification but a smaller effect upon participation (.11).

For Mulford and Silins (2003) the main factors linking Organisational Learning to Academic Achievement were the quality of the teacher's work, student participation,

student engagement, student self-concept (confidence of success, satisfaction with grades), and the ability to retain information (See Fig 2.3 below). Students from supportive home environments and/or from families with social-economic status were noted to more academically successful than others. As such, school leadership can only be indirectly related to student outcomes, but as Leithwood and Jantzi (1999b) illustrate with regard to school engagement there is still a moderate, but significant, effect.

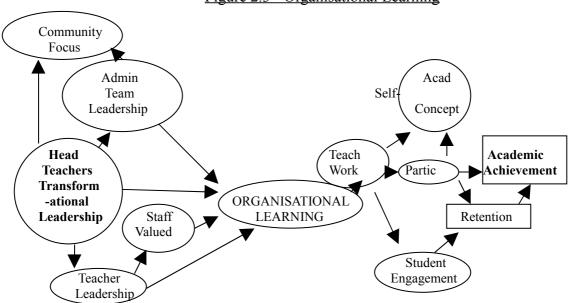


Figure 2.3 - Organisational Learning

Mulford, B. & Silins, H. (2003) p. 182

Mulford and Silins (2003) believe that the LOLSO research identifies three major elements in successful school reform. The first element is related to how people are treated with success being more likely when people act rather than react and are supported and empowered. The second element is the professional community with shared norms and values, and the third element relates to the presence of a capacity for learning. This capacity for learning is most readily identified in an ongoing, optimistic, caring, nurturing professional development programme. For Mulford and Silins (2003), the LOLSO research provides clear evidence that the notion of the 'great man or woman' theory does not lead to sustained improvement. As such there is a clear difference between the LOLSO research and the Hay-McBer view of school leadership.

'Nowhere is the difference clearer than in our different interpretations of the concept 'transformational leadership'. The Hay-McBer emphasis on the 'drive and the ability to take the role of leaders, provide clear direction, and

enthuse and motivate others' is much different than the from LOLSO's stress on 'support, care, trust participation, facilitation, and whole staff consensus'. (Mulford and Silins, 2003, p. 183)

Leithwood et al (2004a) support the view of Mulford and Silins (2003) as to what is likely to result in successful school reform and enhance student outcomes. They comment that transformational leadership has also demonstrated its influence when large-scale reforms have been necessary. Leithwood et al (2004a) undertook a significant study of strategic leadership for large-scale reform through an investigation of the implementation into schools of England's national literacy strategy (NLS) and national numeracy strategy (NNS). This had been a major centrally driven initiative impacting upon all English schools. The study centred upon the distribution of leadership functions across various roles and considered how they provided the strategic direction that was required for the Strategies to be successfully implemented. Leithwood et al (2004) concluded their research into the introduction into England of the National Literacy and Numeracy Strategies by judging it as one of the greatest examples of large-scale school reform in the world to date. Other research into the first year of implementation had been large scale and government sponsored, drawing on evidence from national testing and inspection findings. It had shown that pupils taught according to the structure laid down by the Strategies were making more than the expected progress (Sainsbury et al, 1998, Ofsted, 1999, Earl et al, 2000)). From the evidence of their study Leithwood et al (2004a) were persuaded that a key factor for its success was the nature and quality of the leadership with its emphasis upon transformational practices.

Geijsel, Sleegers and van den Berg (1999) undertook two studies in the Netherlands to examine the evidence of the impact of transformational leadership in schools. Similar to Leithwood et al (2004a), they found these behaviours to positively impact on the introduction of large-scale innovations. Where there was a high degree of innovation in schools, Geijsel, Sleegers and van den Berg (1999) were able to demonstrate that school leaders showed more vision and more support than in low innovation schools. In addition, they demonstrated more care for the personnel and involved them in more decision-making.

Such strength of views, however, are not shared by all researchers. Barker (2005), Lam (2002) and Southworth (1999) for example all question the meaning of 'success', commenting that there is little empirical evidence that leadership does actually impact upon student outcomes. Lam (2002), for example, concludes that

'leadership effectiveness in transforming schools is highly dependent on the formal arrangement of work, the degree of power sharing, group norms and common beliefs that underscore the overt behaviours of school organisational members. When there is incompatibility among these factors, the effects of one can interfere with those of another so that there could be mutual cancellation effects, rendering the leadership role on organisational learning far less influential than are reported elsewhere.' (Lam 2002, p. 448)

This is further supported by Gray et al (1999) who reported 12 case studies of schools that claim to have achieved higher levels of success, but suggested that effectiveness factors drown out evidence of transformational leadership.

Eyal and Kark (2004) sampled 140 Israeli elementary schools to support their hypothesis that transformational leadership encourages radical change. One of the outcomes of their research was to show that transformational leadership is most closely associated with proactivity rather than organisational innovation (Proactivity being the generation of ideas rather than the school implementation of these ideas). Their findings suggested that most schools in their sample mostly promoted a trial-and error entrepreneurial culture that did not allow for the full materialisation of radical change.

Resulting from their reviews of 41 studies of leadership, Hallinger and Heck (1998) conclude that the common assumption of large leadership effects on school outcomes is not warranted. They suggest that the effects are small, and require sophisticated research techniques to discover. Geijsel, Sleegers and van den Berg (1999), despite their positive position on transformational behaviours found that their findings were consistent with Hallinger and Heck (1998) which was that most leadership impact is likely to be indirect by nature.

Griffith's (2004) study into elementary schools explored the relationship between principal transformational leadership and school performance. Also, the study explored the relationship between transformational leadership and different school populations. As seen, most transformational leadership studies have not examined the link between headteacher/principal behaviour and school performances. The study by Griffith (2004) attempts to do this. Again the links to teachers are of significance, but not though to student outcomes. The result of the research was that there may be a positive relationship, but again, if there is, it is indirect by nature. Griffith (2004) was able to demonstrate positive effects on teacher job satisfaction and that, in turn, was associated with smaller achievement gaps between minority and non-minority students. Also the gaps were at their smallest when the teachers perceived the leaders to be transformational. Griffith (2004) suggests that greater job satisfaction, low staff turnover may result a more positive classroom and school climate that is conductive to learning and achievement.

In summary, as Harris and Chapman (2002) comment:-

'Despite a wealth of school improvement literature advocating more collaborative, democratic and distributed forms of leadership, clear links with improved student outcomes have yet to be established.' (Harris and Chapman p. 126)

Hall and Southworth (1997) extend the criticism further considering the evidence of the power of a visionary leader to bring about school improvement as measured in terms of student outcomes as being 'presently lacking'.

## 2.8 Assessing the Effectiveness of Transformational Leadership over other leadership styles

As discussed above, not all commentators and researchers are convinced the transformational leadership behaviours are the most effective attributes in raising student attainment.

Hopkins (2001) is critical of the empirical research that supports the argument for transformational leadership categorising it as a plastic term (2001, p. 2). He comments that most commentators tend to mix their own views over what leadership should be with their descriptions of what leadership actually is. Gronn (1999) displays similar sentiments by commenting that leadership styles can begin life as a flimsy rudimentary impressionistic tendency that has been observed by someone somewhere. This, he feels, soon metamorphoses into a more solid concept for a more desirable way of doing things.

Hopkins (2001) identifies with the need to expand the teaching and learning repertories of teachers through professional development. Whilst recognising transformational leadership as a

'necessary but not sufficient condition for school improvement' (Hopkins, 2001, p. 2).

He advocates an 'instructional leadership' style focused upon two key skill clusters. These are strategies for effective teaching and learning on the one hand, and the conditions that support implementation on the other, in particular staff development and planning. Sheppard (1996) supports Hopkins (2001) view, stating that for staff to be developed, the headteacher needs knowledge on the 'technical core' of the school. In particular they need to know what is required to improve the quality of teaching and learning and this, he suggests is as an aspect of instructional leadership.

Hopkins (2001) concludes that instructional leaders are able to create synergy by balancing teaching and learning with capacity building. If the levels of student achievement and learning are to be raised within schools, then we need to develop styles of leadership that promote, celebrate and enhance both the importance of teaching and learning and staff development.

Locke (2003) is sceptical of the impact that transformational leadership behaviours upon redesigning an organisation commenting that

'no successful, profit-making company that I know of has ever been run by a team' (p. 273).

While top leaders are likely to engage many people in processes leading up to such decisions, top leaders have the final responsibility for them. Locke (2003) considers that when the role and the range of tasks of leaders are considered, some should not be distributed or shared, whilst others can be at least shared. Those shared are the ones that are goal setting in relation to the vision, and the development of the culture. Leithwood and Jantzi (1996) counters Locke's (2003) comments, stressing the uniqueness of a school organisation and stating they it cannot be compared to a profit-making company.

The Hay-McBer (2000) model has been strongly advocated by the National College of School Leadership. However, Collarbone (2001) finds no evidence of the impact of programmes advocating transformational approaches such as the Leadership Programme for Serving Headteachers as delivered by the NCSL. His concern over this lack of evidence becomes a criticism of the transformational model on which it is based. Despite the desired outcome to transform schools, essential elements appear to be missing from the programmes. Day, Harris & Hadfield (2001) comment that many of the training models designed to promote transformational leadership behaviours actually focus upon managerial rather than leadership functions. As a result they fail to build up the capacities of headteachers to reflect upon their own values and do not provide sufficient emphasis upon building the range of interpersonal qualities and skills necessary and appropriate for effective leadership. For Day, Harris & Hadfield (2001) this demonstrates that transformational leadership on its own is not enough to drive a school forward.

'For governments' rhetoric of lifelong learning, high teaching standards, pupil achievement and school improvement to become a reality, schools need to be led by headteachers who are not only knowledgeable and skilled in managerial techniques but also, people centred leaders who are able to combine the management of internal and external change with a strong development and achievement orientation.' (Day, Harris & Hadfield, 2001, p. 37).

Southworth (1999) views transformational leadership largely as an

'extant theory, but not something evident in practice' (Southworth, 1999, p. 50).

For Southworth (1999), headteachers have a dual role of chief executive and lead professional. He also notes that as the external pressure for school improvement has increased, so too have the management tasks, resulting in much more to administer. Based upon his qualitative research from three different English primary school projects, Southworth (1999) considers that whilst the school improvement movement may look as if it is encouraging transformational leadership, it may, in fact, just be the extending the transactional role of the headteacher. Southworth (1999) emphasised the 'being done to the head'. He considers the external policy and practice of national and local reformers and policy-makers as having a significant impact on the primary headteachers within his studies, with them becoming the objects of change rather than the agents of change.

'Consequently, these reforms mean that the reshaping of headship is largely being done with heads being involved in the redesign process: heads are merely the recipients of the product. They are the objects to which the change forces are applied. Headship is therefore being largely designed and driven by the policy makers not by the practitioners.' (Southworth, 1999, p. 63)

The conclusion drawn by Southworth (1999) is that is that while transformational leadership is a pre-eminent theory amongst some academic theoreticians, it is not informing the process of change. For him, external policy-makers are driving change and they determine the practice. In reviewing leading the learning and teaching in primary schools, Southworth (2001) comments upon leadership as being contingent upon context. Leadership styles change according to factors such as the quality of staff, current levels of performance, school reputation and community image, school environment and location. Context also becomes important in Day, Harris & Hadfield (2001) research, commissioned by the NAHT in the UK. This looked into how effective leadership theories matched up to the practice of successful headteachers in times of change and recognised the highly contextualised nature of the role.

For Day et al (2000) the most important findings from their research on effective leaders is that they are surrounded by a matrix of expectations and demands. Within this they constantly have to manage several simultaneously competing sets of tensions and they

have to make the right tough decisions. In leading the school, their actions were transformative building on esteem and competence, raising the ethical aspirations of both leader and followers and inspiring commitment and performance. In addition, however, transactional actions around ensuring that systems were maintained and developed and that targets were formulated and met and that their schools ran smoothly also featured to enable them to manage the tensions and dilemmas. Day et al (2000) termed this as the exercising of values-based contingency leadership. The contingency approach to leadership rejects the conception that there is a best style that is appropriate for all situations. Different leadership styles emerge according to context and situation and that they are differentially effective depending upon those situations. Underpinning this approach for Day et al (2000) is the view that is it the personal moral values of the leader that drive them and their followers forward and therefore determines the choice of leadership style. Sergiovanni (1992) describes a new hierarchy in schools that places purposes, values and commitments at the top and teachers, headteachers, parents and students below in the services of these purposes. Sergiovanni (1995) concepts of 'servant leadership' closely relate to Day et al's (2000) findings. The servant leader is servant first. It begins with the natural desire to want to serve and then a conscious decision brings about an aspiration to lead. As a servant leader care is taken to first make sure that other peoples' highest priority needs are being served. Crippen (2005) considers the concept of servant-leadership as a possible vehicle for systems change within schools. However, it is not a panacea. Crippen (2005) describes a transformational, democratic form of leadership that requires time to implement and it needs abundant opportunities to involve all members of the learning community. Again, context is an issue as schools in crisis or chaos would not have that time or the opportunity to involve staff. In these circumstances a transactional and more directional approach may be necessary to stabilise the school before the building of this democratic school culture.

Day et al (2000) conclude that these alternative models fail to capture, explain or represent current leadership practice because they are reluctant to acknowledge that leadership can be a complex, messy and on occasion, a completely non-rational activity that is value laden and value driven. Day, Harris & Hadfield (2001)) recognise the importance attached to effective leadership in schools by the government in the English system through the various NCSL courses. However, as highlighted, courses such as

the Professional Qualification for Headship and Leadership Programme for Serving Headteachers fail to address key themes that emerged from their study. If values are central to effective leadership, they must be reflected in the training, along with a focus on critical thinking.

Hallinger (2003) considers that three conclusions can be drawn from these discussions. First, over the long haul of school improvement, leaders have to develop and expand their leadership repertoires. Secondly, the school improvement journey offers opportunities for the development of new understandings. Thirdly, the collaborative processes inherent to the enquiry approach to school improvement offer the opportunities to teachers to study, learn, share and enact leadership.

## As Gronn (1999) comments

'If commentators on (leadership) styles are agreed about one thing then it is that there is no one approach to leading which qualifies as a style for all seasons' (Gronn, 1999, p. 118).

## For Collins (2006)

'the best leaders of the future in the social sectors will not be purely executive or legislative, they will have a knack for knowing when to play the executive chips and when not to' (Collins 2006, p. 12).

Leithwood and Jantzi (2005) respond by considering that the conceptions of transformational leadership as having

'become more complex, nuanced and sensitive to context in response to both empirical evidence and scholarly criticism over the past 20 years' (Leithwood and Jantzi, 2005, p. 179)

## 2.9 Effective Leadership in Schools facing Challenging Circumstances

What are the attributes, therefore, that the effective leader in a school facing challenging circumstances would be expected to possess? Whilst some commentators have been

critical of the impact of transformational leadership of student attainment levels and other outcomes, it appears to hold up as a good starting point.

The research into successful leadership in schools facing challenging circumstances is not substantial. Keys, et al (2003) reviewed databases of the literature worldwide since 1990. The review was centred upon those studies that identified and explored factors associated with successful leadership in urban and challenging contexts. 28 texts were considered relevant and of a high enough quality to be critically summarised. The leadership styles identified were those of shared leadership, distributed leadership, instructional leadership, transformational leadership, transactional leadership and charismatic leadership. Whilst no one style was advocated nor excluded, effective headteachers were able to demonstrate the following behaviours:-

able to share vision
able to involve staff in the leadership process and distribute leadership
were focused upon the quality of learning and teaching (especially literacy)
were focused upon raising achievement
able to involve others including the community and parents.

Keys, et al (2003) concludes that it is not so much the nature of the style of leadership that makes the headteacher effective, rather than their ability to prioritise and thereby establish a direction, motivate staff and build capacity by developing staff and harnessing resources. Underpinning their ability to prioritise is the headteacher's awareness of the context within which the school operates. Shamir and Howell (1999) contend, most writings about transformational leadership pay little or no attention to contextual considerations.

Reynolds et al (in Davies and West, 2003) consider there to be little evidence about this 'context specificity' and choose to focus upon the universals of 'what works' across a range of schools to suggest improvements to schools that face challenging circumstances. Again, their literature review outlines the importance of having vision, sense of direction, ability to motivate, plan and use performance data. Across all types

of school a pre-condition for improvement is transformational leadership offering the possibility of change.

Reynolds, et al (2001) in their review of research and practice as to 'what works' with regard to schools facing challenging circumstances consider the following recipe of measures as leading to success.

For schools facing challenging circumstances to improve they need to have/do the following:-

A multi-level approach with a stated focus on classroom improvement and academic achievement

Strong leadership at headteacher level before building an effective leadership team, before gaining staff commitment, before a large input of resources

Secure the understanding of, and preferably, the involvement of, the community, especially parents

Adopt the characteristics of high-reliability organisations (clarity of mission, inflexible goals, robust monitoring, data richness, standard operating systems, focus of pupils at risk of failure, pro-active recruitment, rigorous performance evaluation, high performing equipment)

A 'club' structure with a support network (Local Authority/other schools)
Strong rules and processes

Seek a sense of early achievement through a clean-up campaign and fabric improvement

(Adapted from Reynolds et al 2001)

Potter and Reynolds (2002) also maintain that there has been little discussion about 'context specificity' with regard to what works in challenging circumstances. Reynolds et al (2001) do note the variations between schools facing challenging circumstances, recognising that they range from failing to highly effective schools, and therefore expect that each school will design an improvement strategy to fit its specific circumstances.

In Storey (2004) review of distributed leadership in schools, she is critical of the 'what works' elements as applied to schools facing challenging circumstances. She

acknowledges the transformational leadership behaviours necessary to drive forward, but without application to the specific school context, she questions whether those behaviours can be successfully 'unpacked' to deliver the necessary cultural change. West, Ainscow & Stanford (2005) acknowledges that describing the problems confronting schools and indicating the best way forward, is not the same as knowing how to go about it.

Barnett and McCormack, 2003) concludes that school principals need to have a thorough understanding of vision and its role in schools and, in so doing it needs to be relevant to context.

'Principals should recognise the possibility that context may make leadership behaviours more or less effective....Moreover, a principal must be able to adjust his/her leadership behaviours in order to ensure that leadership is relevant and assist a school towards positive outcomes.' (Barnett and McCormack, 2003, p. 89)

Southworth (2001) comments that context matters because leadership is contingent on many factors. In their first year, a new headteacher has to undertake a big comprehension exercise, making sense of a complex, dynamic and multi-layered institution.

Myers (1995) describes a 'competency line' below which the school cannot use normal school improvement techniques. In such circumstances the 'what works' recipe becomes decreasingly wholesome. Even if we assume competence at leadership and classroom level (and we can, as 86% of schools in challenging circumstances are at least satisfactory – HMI, 2003) there are still significant levels of unpredictability, conflict and dissent arising from factors such as:-

multiply staff changes/recruitment difficulties staff factionalisation poor relationships with professional staff organisations poor physical environment budgetary considerations

falling rolls/inclusion of other school's excludes

high proportion of children with additional needs

pupils from unstable home environments (sometimes lacking appropriate role models)

high proportion of unmotivated pupils with behavioural issues community, 'estate' and other peer pressure on pupils a migrant population and/or pupils who's language at home is not English poor/casual attendance and high rates of unauthorised absence poorly educated parents with low opinions of the education process a community of poverty and deprivation

local authority/church proposals for school organisational and other changes poor reputation/loss of public support

poor press

other 'market' forces

In schools without significant student underachievement, contextual factors may be a positive force for improvement enabling leaders to move forward and acquire the technical core knowledge over time. In the challenging school, the leader needs it from the outset or runs the real risk of those barriers becoming a negative force that pushes them back beyond Myers's (1995) 'competency line'.

Harris and Chapman (2002) in their case study of 10 schools facing challenging circumstances noted that effective leaders in such school are constantly managing tensions and problems directly related to the particular circumstances and the context of the school. They considered the main leadership task as one of coping with unpredictability, conflict and dissent on a daily basis without discarding core values.

Barker's (2005) 'Hillside' study clearly demonstrated the practical dimensions that prevent leadership from being seen purely as a systematic process. The three year study showed that ways of working were fragmented, discontinuous, and peppered with interruptions. Headteachers operated in a 'swamp'. Daily chronicles for the study

illustrating time-consuming involvement with teachers and students and endless micropolitical manoeuvres.

The outcomes are as Ferguson et al (2000), note. Schools in disadvantaged areas are more likely to be harshly judged by OFSTED. They note that only one in every one hundred schools received 'very good' inspection reports. This compares to one in five for those schools in stable communities with low numbers of disadvantaged learners.

As Ansell (2004) notes in his paper on Improving Schools Facing Challenging Circumstances:-

'the leadership challenges are disportionately hard, in both professional and personal terms. It is no surprise that some evidence suggests that there are not enough educators applying for leadership positions in such schools'. (Ansell, 2004, p. 1)

Day, et al (2000) considered that the power of context largely dictated the leadership approach heads in their study adopted. For many of them it was highly contingent upon the nature of the problem or upon the issues facing them. Day, Harris and Hadfield (2001) found that the heads in their study were adaptive and good at balancing actions based upon the involvement of others and the need for individual decision.

Hallinger and Heck (1996) conclude that it is meaningless to study leadership without reference to the school context. The context of a school is a mix of constraints, resources and opportunities. Hallinger (2003) comments that no single style of leadership seems appropriate for all schools. Schools requiring a 'quick turnaround' need an urgent stimulus to convert low expectations into success. In such cases strong instructional leadership may be a more appropriate leadership approach.

For schools facing challenging circumstances that are deemed to be failing or in need of improvement Ansell (2004) discusses the initial phase of improvement that restores functionality to the school. Based on discussions with leading thinkers from industry, government and education, they consider that this first phase of improvement requires the engagement of people to the organisation with a high level of knowledge of facing

challenging circumstances. Those with the contextual knowledge are seen as being critical to success. Secondly, and related, is to bring in a new headteacher, preferably experienced, with a long-term commitment to the school. Vision, planning, target setting, clear roles and responsibilities are important factors. Leaders are seen to direct, display confidence, have clear behaviours, and be ever present with students, staff and parents. They are expected to work with external partners and regularly monitor the plan carefully with regular reviews. For these first phase failing schools, authoritarian 'top-down' forms of leadership are the most common.

Harris and Chapman (2002) study in 10 schools demonstrated that the most effective leaders used a variety of leadership styles. For example, at times of inspection it was autocratic focused upon policy implementation and consistency of teaching and learning practice. As Male (2006) comments that for schools in special measures the required response will need to be

'largely managerial as there are many tried and trusted routes out of Special Measures. The need to engage in leadership behaviour is less important than ensuring good practice'. (Male, 2006, p. 3)

However, following on from inspection, Male (2006) commented that all the headteachers had selected approaches that were transformational. All had actively sought to engage teachers in developmental tasks that were crucial to moving the school forward.

As West, Ainscow & Stanford (2005) and McMahon (2003) conclude, the second phase of school improvement is sustainability and it is that that remains the bigger challenge.

West, Ainscow & Stanford (2005) is also critical of the 'what works' recipe. In their view this underestimates the social nature of the way practice evolves in individual schools. Their study of 34 secondary schools facing challenging circumstances in England lead them to suggest that the more appropriate way forward is to focus upon the right ingredients for the recipe. Each recipe mixed differently to suit the contexts and circumstances of individual schools.

Harris and Chapman (2002) when summarising conclude that the effective leader in a school facing challenging circumstances is, therefore, adept at selecting the approach needed to match the stage of development that the school is currently in. They comment that there is no one leadership style, but for the effective leaders there is a greater emphasis upon forms of leadership that are people-orientated, transformational and empowering. These effective leaders have the confidence to deal with the conflict, dissent and unpredictability and be contentious themselves. They are highly pragmatic and resilient and work to challenge negative attitudes both towards and within the school. Their research demonstrated that these effective leaders were firm in relation to values, expectations and standards, and on occasions were ruthless. The common denominator that linked all their case schools however was the way in which these leaders interacted with others. They were able to convince others that the vision was worth sharing and pursuing. In addition, they were also

strategic
driven by a belief that all children can succeed
morally based
able to build communities
able to shape and influence culture
focused upon helping other understand the problems
able to take advantage of opportunities
and recognising of the need to invest in the learning of others

#### 2.10 Summary

Transformational Leadership behaviours are a 'necessary but not sufficient' (Hopkins 2001, p. 2) prerequisite for whole school improvement. The DFES (1998), Hay Group (2000) consider the transformational headteacher to have a high understanding of others and of the context within which they operate so that they can use the best of their teams' strengths to effectively deploy resources to raise standards of attainment. Unlike businesses, schools tend to have unique goods (the students), unusually committed employees and porous boundaries (Leithwood and Jantzi 2004, Sergiovanni, 1994). To ensure that the organisational structure is stable enough to drive school improvement forward, commentators such as Leithwood and Jantzi 2004, Steinbach, 1999a, Eden

1998 stress the need for supplementary transactionary leadership behaviours to be present in schools.

Leithwood and Jantzi 2004 identify three broad factors that make up transformational and transactional leadership behaviours in school. They are setting direction; redesigning the organisation and developing people. In terms of setting direction, Nanus (1992) comments that the most powerful engine driving an organisation forward is that of a widely shared worthwhile vision. Hallinger and Heck 2002, Marks and Louis 1999, and Leithwood and Jantzi 2004 see the setting of goals as underpinning the organisational desire to achieve the vision. Goal setting underpins the vision by giving milestones to work towards and contributes towards motivating followers. A motivated school team is able to successfully redesign the organisation, modify the school's organisational structure; build collaborative processes; and build productive relations with the parents and other community stakeholders thereby modifying and strengthening the school culture. A key element in modifying and strengthening the culture is the need for the headteacher to focus upon the people within the organisation and to support staff development by putting others before themselves.

Strong transformational, supplemented by some strong transactional leadership behaviours should therefore impact positively upon standards in schools. However, as Harris (2004) and Mulford and Silins (2003) comment, such links are rare, despite studies such as Leithwood and Jantzi 2004, Mulford and Silins (2003), Geijsel, Sleegers and van den Berg (1999) all of whom were able to demonstrate some leadership behaviour effects on student outcomes.

To successfully raise student outcomes Hopkins (2007) comments that good quality teaching and learning; a balanced and interesting curriculum; good student behaviour and attitudes; good partnership arrangements; a good, well resourced, environment and a professional learning community are as important as good leadership. For Hopkins (2001), instructional leaders are the most effective as they are able to develop strategies for effective teaching and learning and create the conditions that support their implementation. Sheppard (1996) shares this view requiring headteachers to have a strong 'technical core knowledge'. Day et al (2000) and Collins (2006) discuss the need for the exercising of 'values-based contingency leadership' supporting the view that

headteacher leadership needs to be able to move between styles as and when appropriate.

A successful headteacher (in terms of raising student outcomes) would appear to be one that adopts strong transformational qualities, particularly in terms of motivating staff to work towards the vision, but with additional transactional skills and technical knowledge enabling them to develop effective strategies at classroom level for teaching and learning.

For the headteacher in a school facing challenging circumstances determining the 'right' mix of a value-based contingency leadership model and implementing it can prove difficult, particularly given the need to manage the tensions and daily problems associated with the circumstances and context (largely negative creating barriers to learning) within which the school operates. As West et al (2005), Harris and Chapman (2004), Barker (2005) demonstrate, the unpredictability, conflict and dissent that emanate on a daily basis from the school circumstances and context can create largely transactional (fire fighting) responses that leave insufficient time for the transformational qualities needed to lead the drive forward, or to even establish the core vision and direction. This issue is significant with a third of all secondary schools facing challenging circumstances being unable to move forward across Myers's (1995) competency line resulting in the leadership and management being declared, at best, unsatisfactory, and the school overall, as failing.

An effective headteacher in a challenging school, needs to be able to:-

create a widely shared worthwhile vision and agree milestones (the first being to reach the competency line) to work towards the vision;

have a working technical knowledge that enables the school to moves around some negative contextual factors, to works with factors to neutralise/lessen their effect and to have an ability/confidence to confronts other negative factors;

distribute leadership to develop dual capacity for transformational and transactional decision making, thereby enabling both reactive and proactive issues to be addressed simultaneously with, over time, an increasing focus on the latter.

The ability to deliver the above, underpinned with the qualities outlined by Harris and Chapman (2002), should enable the headteacher to

effectively work with others to organise and manage all the first-order 'front line' variables capable raising student outcomes; and

provide systems focused upon continual staff development to enable both the headteacher and staff to effectively work within an ever changing environment.

#### 2.11 Conclusion - Questions for Consideration

As HMI (2003) outline, approximately 30% of all schools in challenging circumstances make good progress when measured against student outcomes. In 86% of these schools the leadership and management are deemed to be at least satisfactory or better. For those headteachers, deemed to be making good progress, what is it about them and their organisation that has led to those judgements? Do they, for example, display the range of attributes outlined by Harris and Chapman (2002) or fit the model outlined above? Are they transactional or authoritarian, assuming that the school is in a first phase development? Are they instructional, focused upon teaching and learning outcomes only? The research above provides a structure for further investigation to the key question, that is, what qualities do the effective headteacher/leaders in challenging schools have that make them 'good'?

From the above literature, we can assume that these headteachers will be committed to transform and to moving their school forward. This transformation will be change that is significant, systematic and sustainable if they are to move away from the challenging circumstances within which they operate.

Also, from the above research literature it is likely that they have created a positive ethos in their school and have either created or maintained a productive, disciplined learning environment. They will be 'people centred' keen to involve all staff in the decision making process, keen to support the professional development of all staff, and keen to ensure that all staff and particularly teachers perform to the best of their ability in the pursuit of higher standards of student attainment and other student outcomes.

Bass and Avolio (1985) describe leadership behaviours that can transform organisations. Leithwood and Jantzi (1994) apply these behaviours to educational settings. From the above it is to be assumed that the effective headteacher is adept at 'setting the school direction' 'redesigning the school organization,' and is capable of 'developing people'. The research literature above recognises the importance that such transformational leadership behaviours have upon school improvement, therefore are the more successful headteachers in school facing challenging circumstances displaying these behaviours to a greater degree than other headteachers in similar circumstances?

Some of the research tools used by Bass and Avolio (1985, 1994) and adapted by Leithwood and Jantzi (1996, 1999a), Day et al (2000) provide a mechanism through which these first two questions can, in part, be addressed.

The key to the success of a secondary school operating in challenging circumstances is its ability to move above the 25% or less 5A\*-C GCSE grade benchmark and exceed the 2006 floor target of 30% or more 5A\*-Cs. The literature has demonstrated that the impact of leadership upon student outcomes is, at best, indirect and limited. Although much greater impact can be seen with regard to determining the school conditions that in themselves create the conditions for significant improvements in student outcomes. Therefore what degree of influence can the effective headteacher in a school facing challenging circumstances be seen to have on the raising of student attainment?

The literature above clearly outlines what it means to be a secondary school facing challenging circumstances. The factors impacting upon the schools are very varied and input into the individual schools in different intensities. The context within which the school operates, therefore, becomes very important. Whilst the literature above illustrates a lack of research into the impact of context on effective leadership outcomes, there is recognition that it is a significant factor (Southworth 2002, Reynolds et al,

2001; Storey, 2004; West, Ainscow & Stanford, 2005). Reynolds et al (2001) outlines a 'what works' recipe for all schools to adopt if they wish to improve. Noting the impact of context, the study seeks to conclude by asking if, based upon the evidence presented, is it possible to outline a set of model behaviours that may work in similar schools and are they the ones outlined in the summary above?.

Through an investigation of eight headteachers and their staff working within schools that currently face, or until very recently faced, challenging circumstances, the literature draws us, therefore, to research the following key questions:-

What are the effective leadership skills and qualities of headteachers in schools facing challenging circumstances?

Can any assessment of their influence, relative to student attainment be considered?

Do those skills and qualities match those of a transformational leader?

Can a set of behaviours be identified as a model for similar schools facing challenging circumstances?

# Leading the Teaching and Learning - A study of transformational leadership in secondary schools facing challenging circumstances.

#### **CHAPTER 3 - METHODOLOGY**

## 3.1 Introduction

The central theme of the chapter is to consider the rationale behind the method procedures chosen so that they can provide an additional insight, into the five key issues. The method chosen needs to be able to:-

- a) identify the effective leadership skills and qualities of headteachers in schools facing challenging circumstances;
- b) enable us to make a judgement as to whether these qualities match those of a transformational leader;
- c) identify potential links between leadership styles and student outcomes, and
- d) consider whether a set of effective behaviours can be modelled for similar schools facing challenging circumstances.

This chapter commences by considering the research strategy and design. It reviews the methodological approach taken by the study and the assumptions made. It considers the data collection techniques to be used and the data collection process. In addition, issues around the piloting of the study, the choice of sample, data collection and data recording are also considered. Finally, it reviews how the results are to be presented. Throughout the chapter there are references for the need for validity and reliability.

## 3.2 Determining the research strategy and design

## 3.2 (a) Research and Educational Phenomena

Borg (1963) comments that research is a combination of both experience and reasoning and therefore should be considered as the most successful route to the discovery of the

truth. Educational research is seen by Bassey (1999) as critical enquiry that is aimed at informing educational judgements and decisions in order to improve educational actions. Johnson (1994) considers the ethos of research into educational management is its ability to assist in the development of effective school management.

'Research' is defined by Kerlinger (1970) as 'the systematic, controlled, empirical and critical investigation of hypothetical propositions about the presumed relations among natural phenomena' (Cohen, Manion & Morrision, 2000, p. 5)

Phenomena are observable events, experiences that are occurrences, circumstances, or facts that are perceptible to our senses.

To understand the nature of a phenomena or an environment, Mouly, (1978) states that people tend to seek solutions through experience, reasoning and research with all three being complementary and overlapping.

In understanding educational phenomena, as with other aspects of social sciences, there are contrasting views with regard as to how that investigation should be carried forward. There is an objective (positivist) view that social sciences, similar to natural sciences, are concerned with discovering natural and universal laws that they regulate all social and individual behaviour, or there is a more subjective (anti-positivist) view that, in explaining human behaviour, people differ, not only from inanimate natural phenomena but from each other.

#### 3.2 (b) A positivist approach

The nineteenth-century philosopher Comte is credited (Cohen, Manion & Morrision, 2000, p. 8) for first using the word 'positivism' to describe a philosophical position. A general doctrine of positivism holds that all real knowledge is based upon the experiences of the senses and that knowledge can only be advanced by means of observation and experimentation. Positivism limits inquiry and belief to what can be clearly established thereby disregarding metaphysical and speculative attempts to advance knowledge through reasoning. It is investigation through science, therefore, that provides us with the clearest understanding of knowledge.

Morrison (2002), in Coleman and Briggs (2002), asserts that the major point about positivist approaches to educational research is the way in which it does not stray from scientific method. People are the object of research, feelings need disregarding unless they can be 'rendered observable and measured' (Morrison, 2002, p. 15). Giddens (1976) comments that

'No specific person can possess detailed knowledge of anything more than the particular sector of society in which he participates, so that there still remains the task of making into an explicit and comprehensive body of knowledge that which is only known in a partial ways by lay actors themselves' (Cohen, Manion & Morrision, 2000, p. 27).

In adopting this positivist approach, Giddens (1976) assumes knowledge to be hard, objective and tangible, bound within science and observation. As such, quantitative research methods can be adopted. This is a research strategy that emphasises quantification in the collection and analysis of data. Quantitative research entails employing a deductive approach to the relationship between theory and research with the emphasis placed on the testing of a theory.

Deductive reasoning works from the more general to the more specific, and, in general terms can be considered as a "top-down" approach with first a theory and then a narrowing down into more specific hypotheses that can be tested through the collection and analysis of observations. This test of the hypotheses with specific data collected enables a confirmation (or not) of the original theory/ies.

In quantitative research, the emphasis is on the individual as the object of the research, with the aggregation of the individualised data providing a summative measurement.

Rose and Sullivan (1996) define 'measurement' as 'being simply a way of saying that, in respect of some variable, one case is different from another – not bigger or smaller, better or worse but different' (Rose and Sullivan, 1996, p. 17)

The ability to measure allows us to delineate fine differences in terms of the characteristics under review. It also gives a consistent device or yardstick for making such distinctions as well as enabling us to provide the basis for more precise estimates of the degree of relationships between concepts.

A quantitative approach, therefore, entails a deductive approach that incorporates the practices and norms of the natural science model and embodies a view of social reality as an external, objective reality.

## 3.2 (c) An anti-positivist approach

Cohen, Manion & Morrision (2000) acknowledge the difficulty of applying positivist techniques to the study of human behaviours

'where the immense complexity of human nature and the elusive and intangible quality of social phenomena contrast strikingly with the order and regularity of the natural world'. (Cohen, Manion & Morrision, 2000, p 9)

Ions (1977) expresses concern that, whilst acknowledging the contribution of positivism to the understanding of the social science, the quantification and computation methods employed, assisted by statistical analysis, leads to dehumanising the research. Beck (1979) argues that the purpose of social science is to understand the social reality as different people see it. In so doing, both Ions (1977) and Beck (1979) are taking an anti-positivist view considering knowledge to be personal, subjective and unique. The views taken by Ions (1977) and Beck (1979) are very pertinent when applied to the educational context of both classroom and school where the issues of learning, teaching and human interactions pose the positivist researcher with a significant challenge. Although as Rutter (1979) was able to demonstrate, positivist research can be successfully undertaken within educational contexts.

Bryman (2004) considers that the development of the anti-positivist position has been 'phenomenology'. Phenomenology is a philosophy that is centred upon the need to discover how individuals make sense of their surroundings and the world around them. Phenomenologists tend to interpret the world from the viewpoint of the individual and

the actions they undertake. By acknowledging that human activity is meaningful, phenomenologists are asserting that there is a fundamental difference between the subject matter of the natural sciences and social sciences.

Anti-positivist approaches to study have a number of key features. Not only do strategies take the subject's perspective (with much attention paid to detailed observation), there is often no prior structures or models imposed upon the investigation. The emphasis in anti-positivism is upon words and not the quantification of the collection and analysis of numerical data. Anti-positivist research, therefore, enables words can be broken into semiotic segments. They can be organised to permit the researcher to contrast, compare, analyse and bestow patterns upon them' (Miles and Huberman, 1994)

This non-numerical data is collected and analysed through the use of qualitative research techniques. There are several frameworks that can be used to guide the analysis of qualitative data. The two most frequently cited approaches are 'analytical induction' and 'grounded theory'. Both are 'iterative', meaning that the analysis starts after some of the data has been collected with the implications of that data shaping the next round of data collection.

Analytical induction is an approach whereby the researcher seeks a universal explanation of the phenomenon, and, as a result, keeps collecting data until there is no cases that are inconsistent with a hypothetical explanation. This is a highly rigorous method of analysis.

Similar to analytical induction, grounded theory is also a research method in which the theory is developed from the data, rather than the other way around. That makes this an inductive approach, meaning that it moves from the specific to the more general. It has become popular with researchers as, unlike analytical induction, it is not as exhaustive and it provides useful guidelines as to the number of cases that need to be investigated before the validity of a hypothetical explanation can be confirmed.

Inductive reasoning moves from specific observations to broader generalisations and theories (a "bottom up" approach). In inductive reasoning, initially specific observations

and measures are noted. Inductive reasoning, by its very nature, is more open-ended and exploratory, especially at the beginning. This leads to a detection of patterns and regularities that in turn lead to the formulation of some tentative hypotheses that can be explored. The final stage of the process is the development of some general conclusions or theories. Strauss & Corbin (1990), authors of "Basics of Qualitative research: Grounded Theory Procedures and Techniques" are two of the model's greatest advocates, and define it as follows:

"The grounded theory approach is a qualitative research method that uses a systematic set of procedures to develop an inductively derived grounded theory about a phenomenon". Strauss & Corbin,1990, p.67).

Barnett and McCormack (2003) study, outlined in Chapter 2, was an example of this approach. The purpose of their study was to link transformational leadership behaviours with vision. Although there is literature on visionary leadership, Barnet and McCormack (2003) commented that very little of it was empirical. In addition, they wanted the flexibility to study the interaction between school leaders and individuals. As a result, they chose to develop an inductively derived grounded theory based around semi-structured interviews with twelve people. This qualitative approach using semistructured interviews was used to collect data. Content analysis identified patterns and themes in the data from which propositions and conclusions were drawn. As identified, it was an inductive 'bottom-up' approach involving observations noted through interview, and patterns analysed before a tentative hypothesis/theory was suggested. Their tentative hypothesis/theory suggesting that the influence of vision may be overestimated in schools with the most critical leadership transformational behaviour being individual concern. By adopting a grounded theory approach, Barnet and McCormack (2003) they were able to analyse data that reflected the headteachers/staff own inner experiences, values, opinions and interests, and as such, this has to be subjective and qualitative. Similarly, Southworth and Weindling (2002) in investigating Leadership in Large Primary Schools had also used this technique and found that this approach was unthreatening and that it had led to open and candid conversations. As Bryman (2004) comments the adoption of this phenomenological approach can result in the researcher coming up with surprising findings,

'or at least findings that appear surprising if a largely external stance is taken – that is, a position from outside the particular social context being studied'. (Bryman, 2004, p. 15)

As with the two examples above, semi-structured interviews often become the primary research instrument to provide the data for a grounded theory approach. Some qualitative researchers do not like to acknowledge that they are collecting data in the scientific sense. Watts (2002) comments that they are likely to be

'searching for understanding rather than knowledge; for interpretations rather than measurements; and for values rather than facts'. (Watts, p. 267 in Coleman and Briggs, 2002).

A semi-structured interview gives them that opportunity.

Other research instruments such as questionnaires, structured interviews and structured observations are also available to the researcher. A questionnaire given without an interview is much quicker and enables far more respondents to participate. It cannot, however, probe as deeply into the responses. The lack of ability to probe is also a feature of structured interviews as they are very similar in their structure to questionnaires. Neither of these instruments have the flexibility to enable the qualitative researcher to focus upon the understanding, interpretations or values that they are seeking to explore. As research instruments into social behaviour their use can create certain difficulties. For example, people may vary in their interpretations of key questions; when answering, key items may be missed from the response; there may be problems of memory; they may give an answer they think the researcher wants; they may not understand the question, and therefore not answer; they may feel threatened by the question. It is worth reflecting upon that most of these potential problems can occur with qualitative research also.

Structured observations provide an alternative instrument, although similar to the closed questions in both questionnaires and structured interviews, there is a risk of imposing a potentially inappropriate framework on the setting. Bass and Riggio (2006) comment that there have been very few attempts to assess transformational leadership via

systematic, objective observations. They consider the development of systematic observational coding schemes for transformational leadership as a potential advancement in measurement, giving researchers an objective indicator that does not rely on the ratings of followers. However, and of significance to this study, is the issue that as it focuses upon directly observable behaviour, it is not able to get at the intentions of behaviour

An interview situation gives the respondent an opportunity to speak in their own words. The interview is more open giving a degree of control to the respondent, although the interviewer has control of the interview process. The semi-structured nature of the questions does ensure that the key themes are not overlooked. However, if the question is not clear, or the respondent unclear on how to answer, there is an opportunity to change the language or reword to help to guide the respondent. One of the advantages of the semi-structured interview is that it gives an opportunity for the interviewer to be made aware of issues new to them that they were previously unaware of. The openended nature of the semi-structured interview can create opportunities for additional questions resulting from the interviewer suddenly becoming aware previously unexplored territory that has now become relevant.

## 3.2 (d) Adopting a positivist approach

For this study into Challenging Schools, a qualitative approach based upon semistructured interviews was considered. As highlighted above, this instrument has already proved effective in the development of educational leadership grounded theories. It has the research participant at the centre. It is flexible and uses techniques that focus upon description and context. Leithwood, Jantzi and Steinbach (1999) in their study of the Central Ontario Secondary School clearly demonstrate how a well constructed qualitative study can yield significant additional information on transformational leadership behaviours.

Key to this thesis, however, is an attempt to measure the relative strengths of the transformational leadership behaviours of eight headteacher across two distinct groups of challenging schools. The headteacher is the object of the research with the data being collected from a large number of teacher colleagues from within all the establishments.

The use of an appropriate quantitative approach is able to collect data from a large number of respondents and enable the strengths of leadership to be measured in a way that would be very time consuming and difficult to manage using qualitative techniques. An appropriate quantitative approach provides a 'top-down' deductive research method can be employed with the hypotheses under test being the assertion that transformational leadership qualities are more effective in raising the standards of attainment in secondary schools facing challenging circumstances.

Leithwood and Jantzi (2005) in their review of educational transformational leadership found that in nearly all the major studies where they attempted to measure transformational leadership behaviours they used a quantitative approach based upon some version of a Multifactor Leadership Questionnaire (MLQ) (Bass 1985) or it had been adapted it by the researchers for their own purposes. Unlike qualitative research tools, it does not allow for the relative strengths of the identified behaviours to be analysed in the same depth as may evolve from a series of semi-structured interviews. However, as a quantitative research tool, it does allow for the researcher to investigate a larger number of institutions than would have been the case. Also, due to its wide use in education and across other types of organisations worldwide, its reliability and validity are easier to confirm.

The MLQ is an appropriate research tool for this study. One of its strengths making it suitable for this study is that the MLQ has been designed to measure leadership behaviours against organisational effectiveness. Lowe, Kroek & Sivasubramaniam (1996) undertook a meta-analytical review of the MLQ Literature and found that strong correlations between transformational leadership behaviours and effectiveness exist, although the correlations were greater between transformational leadership and subjective measures of leadership effectiveness (ie, what followers perceive as performance). A more recent meta-analysis by Judge and Piccolo (2004) found similar results.

The MLQ is not the only quantitative research tool that may be appropriate to use. There are other measures that have been developed to assess transformational leadership behaviours. The most widely used alternative is the Transformational Leadership Behaviour Inventory (TLI) developed by Podsakoff, et al (1990). This instrument

measures four key dimensions of transformational leadership. The first dimension captures the core transformational leadership behaviours of developing and articulating the vision, providing a positive role model and motivating followers to look beyond their immediate self-interest for the good of the group. The other three dimensions focus upon the leader's individualised consideration, intellectual stimulation and high expectations of performance. Rafferty and Griffin's (2004) 15 item rating scale measures transformational leaders' vision, inspirational communication, intellectual stimulation, supportive leadership and person recognition. Rafferty and Griffin (2004) claim that these components provide a better factor structure than the MLQ. Similar to the MLQ is the Transformational Leadership Questionnaire (TLQ) specifically designed for UK public sector organisation.

The TLQ developed by Alimo-Metcalfe & Alban-Metcalfe (2001) provides an equally good instrument for consideration of use within this study, particularly given its design purpose. While recognizing and valuing the work of Bass (1985), Alimo-Metcalfe & Alban-Metcalfe (2001) were interested in whether dimensions of transformational leadership which have emerged from North American studies, are similar to those found in UK public sector organisations, particularly health. One concern was the focus by Bass (1985) and others on 'higher' leaders – top managers. They considered that the models of leadership which have evolved from data collected as a result of researchers interviewing top managers and that these models may be different if based upon 'nearby/close' managers.

Alimo-Metcalfe & Alban-Metcalfe (2001) considered that the MLQ and TLI had much in common, however, the emphasis in the UK understanding of transformational leadership appears to be on what the leader does for the individual, such as empowering, valuing, supporting, and developing. In contrast, the US model is primarily about the leader acting as a role model and inspiring the follower. Of the various other measures, most take the MLQ as their starting point and the differences that have evolved appear to lie in a lack of researcher agreement into which behaviour categories are relevant and meaningful for leaders.

'Sometimes different terms have been used to refer to the same type of behaviour. At other times, the same term has been defined differently by various theorists. What is treated as a general behaviour category by one theorist is viewed as two or three distinct categories by another theorist. What is a key concept in one taxonomy is absent from another. Different taxonomies have emerged from different research disciplines, and it is difficult to translate from one set of concepts to another.' (Yukl, 2002, p. 125).

Despite the attractions of adopting a UK instrument, the MLQ became the chosen instrument for this study. The main reasons were:-

- a) it has been the starting point for the development of most of these alternative instruments;
- b) it has been applied worldwide on over 15000 leaders. Such usage and analysis gives additional validity and reliability to the study. The strength of the correlations between transformational leadership behaviours and effectiveness suggest that this is an appropriate instrument to use to answer the main research questions;
- c) its relative simplicity (in its 5X form) for the respondent;
- d) the MLQ measures a range of leadership behaviours that link directly to a range of measurements on perceived outcomes.

This study, therefore, is a linear process. The theory is identified at the start (ie, that transformational leadership behaviours will be at their strongest in schools that have raised standards of student attainment), and the data collected is analysed to test. Correlations are observed, patterns identified and hypotheses formed to explain regularities. The scientific investigation is directed at analysing the relationships and the regularities between selected factors. It is, therefore, quantitative in its approach.

In terms of the research design, a cross-sectional quantitative study was considered appropriate. A cross-sectional design results in the collection of data on more than one case and at a single point in time. The outcome is a body of data with two or more variables which are then examined to detect patterns of association.

For there to be a causal relationship between those variables, Bryman (2002) considers that three conditions have to be met. First, statistics have to have a relationship between the variables. Second, the statistical techniques used have to demonstrate that the relationship is non-spurious, and third, the researcher needs to show a material order to data being analysed. The MLQ does enable the relationships between variables to be studied. Similar to other cross-sectional studies, it is difficult to establish any causal influences due to the lack of time ordering, as all the data is collected at one time. Whilst relationships between variables can be discovered, with all the MLQ studies combined often showing similar strong correlations, the lack of experimental design with the sample being considered over a period of time makes or material ordering of the data difficult to determine. All that can be stated is that the variables are related.

The methodology, therefore, employed here will be limited, and similar to many other quantitative studies on leadership, it is based upon a version of the MLQ. It will give a measure of the strength of the transformational qualities present within the leadership of each school. It will also give a measure of other leadership styles (transactional and laissez-faire). It should also be possible to correlate these qualities against individual school improvement, but, as noted above, excluded from the research will be the other factors, such as the strength of classroom leaders, that may be equally or more effective in bringing about school improvement. Nonetheless, it should contribute to the understanding of the nature and effects of transformational leadership by examining the contributions of such leadership to those school conditions and teacher leader qualities that explain the success of the school.

By adopting this positivist approach, it allows for the measurement of the strength of the transformational leadership behaviours that are observed/in use in each of the case schools.

# 3.3 The Multifactor Leadership Questionnaire

#### 3.3 (a) The Appropriateness of the MLQ

The MLQ was first developed by Bass (1985) as an instrument to measure the strength of transformational leadership behaviours in commercial and non-commercial

organisations. The MLQ has become a standard instrument for assessing a range of transformational, transactional and non-leadership scales. The conceptual basis for the MLQ began with Burns' (1978) description of transformational leadership when 78 executives were asked to describe a leader who had influenced what was important to them in their roles as leaders. In addition, they identified ways in which the best leaders were able to get others to go beyond their own self-interest for the good of the group. To this were added items from prior literature on charisma. As a consequence, MLQs have the advantage that they have been developed and revised over time. Avolio and Bass (2004) reflect on MLQs having been used worldwide and

'in numerous languages, business and industrial firms, hospitals, religious institutions, military organisations, government agencies, colleges, primary schools, and secondary schools. The MLQ has been shown to be equally effective when supervisors, colleagues, peers and direct reports rate the leader' (Avolio and Bass, 2004, p. 14)

The MLQ is an indicator that attempts to measure behaviours similar to that of a 5-point Likert Scale. Such scales offer respondents the opportunity to express an opinion by indicating a degree of agreement or disagreement. As Cohen, Manion & Morrision (2000) comment, they afford the researcher the freedom to fuse measure with opinion, quantity and quality. Attitudinal measurements enable an assessment of headteacher and their staff views to be gained with regard to the headteacher's leadership qualities.

Oppenheim (1992) comments that attitudinal scales are relatively overt measuring instruments, and, as such, we should not expect too much of them. Their chief function is to divide people roughly into a number of broad groups with respect to a particular attitude, and to allow us to study the ways in which such an attitude relates to other variables in the survey. For this survey, a five point rating system was used to produce ordinal variables. The advantage to the study of using a Likert Scale was that they perform well in terms of a reliable ordering of people with regard to a particular attitude.

The project collected data from eight schools from both the headteachers and a sample of their staff. Analysis of the data provided a base from which judgements about the

various leadership qualities of each headteacher could be made, and provided the means to compare and contrast the differences/similarities between the headteachers and their schools.

Both the headteachers and their staff were presented with the multiple indicator measure. The MLQ is an indicator that is able to measure a set of attitudes relating to leadership strengths and qualities and was seen as appropriate for this study. The indicator used was the MLQ 5X Short Form with some very minor adaptations that had been highlighted as a result of the pilot study. The MLQ 5X is a series of 45 statements, not questions. These statements, known as items, are designed to measure the intensity of the feelings about the area in question. Each respondent's reply on each item is scored and then the scores for each item are aggregated to form an overall score. The phrasing of the items is varied so that some items suggest a high score for agreement and others a low score, that way identifying respondents who exhibit 'response sets'. That is, people who respond to questions in a consistent way, but one that is irrelevant to the concept being measured.

Another reason for choosing this instrument in preference to some of the others outlined above is that it assesses the full range of leadership styles. Previous leadership models have fallen short in explaining the full spectrum of leadership styles, ranging from the charismatic and inspirational leaders to avoidant laissez-faire leaders (Bass & Avolio 1990).

Each school in the survey was presented with a 'leader' MLQ and 50 'rater' MLQs. The 'leader' MLQ were a series of items for the headteacher to assess their qualities, and the 'rater' MLQ were the same items for the staff to assess the qualities of their headteacher. It was the 'rater' forms that were then used to determine the strengths of each headteacher, and upon which the bulk of the analysis is based.

A good response to the 'rater' MLQ from every school was important in enhancing the project's reliability and validity. The rater/follower needed to know the headteacher, and therefore the length of service within the school was a factor. Temporary staff, and staff recently arrived in the school, were also given the opportunity to assess the headteachers, but were identified separately to assess if there were any differences in

perceptions. After the pilot study non-teaching staff were removed as raters because many had been unable to rate the headteacher across all the variables. A follow-up discussion with one of the pilot headteachers commented that a significant number of non-teacher staff had felt it difficult to rate him, due to the relatively indirect nature of their relationship and would have rather rated their closer line managers.

Similar to a postal questionnaire, the main advantages of this approach were the ease by which the form could be distributed and the data collected, the low cost of processing, the avoidance of interviewer bias and the ability to reach respondents who worked in widely dispersed schools across the north of England.

To encourage a good response rate, thereby further reducing any bias, each school was offered the opportunity to have their responses reported back to them in a framework that provided supporting evidence for Section 6 of the School Self-Evaluation Form. This helped ensure that within each institution, a named co-ordinator (who was not the headteacher), had the responsibility to encourage or collate the responses. This offer also helped to make it easier to secure the support of the participating schools.

Another advantage of this instrument that encouraged a good response rate was that on average, it took only approximately 15 minutes to complete and respondents needed to have the reading age of an average USA 14 year old.

Some of the disadvantages of this approach were the lack of opportunity to correct misunderstanding, to probe, or to offer explanations or help. Also, there was no check on incomplete responses, and no check on the passing of the form to others. In addition, to be accurate, it also needed to reflect an individual's strength of feeling and not be completed as part of a group.

As Belson (1986) comments that the validity of questionnaires centres around whether respondents answer correctly, honestly and accurately and secondly around whether those who fail to return their questionnaires would have given the same distribution of answers as did the returnees

In terms of strengthening its validity, Hammersley (1992) comments that the research will be plausible and credible if the evidence is abundant. Therefore, the response rate to the MLQ significantly impacts upon its validity and reliability, and a minimum of fifteen 'rater' responses were looked for from each school. Avolio and Bass (2004) comment that the MLQ has validity with as few as three staff so long as they are directly line managed by the leader.

The study's internal validity is strengthened however as the 'leader' MLQ provides a second method of data collection. If similar responses to the items by both headteacher and teacher are achieved, then this triangulation helps to identify priorities and support the study's reliability.

Bell (1999) describes triangulation as

'cross-checking the existence of certain phenomena and the veracity of individual accounts by gathering data from a number of informants and a number of sources and subsequently comparing and constrasting one account with another in order to produce as full and balanced a study as possible' (Bell, 1999, p. 102)

The 'rater' forms gave total anonymity to the respondents and a sealable envelope was also provided. The research was limited to teachers and, therefore, did not include other non-teaching staff, governors, parents, students or other stakeholders all of whom are directly affected by leadership.

The questionnaire used was based upon the MLQ 5X and authorised by Mind Garden Inc. for use in this thesis (See Appendices F). This questionnaire asks leaders and their followers to describe their organisational leadership across 45 items using a frequency scale from 0 to 4 (See below, p73). The MLQ measures transformational, leadership, transactional leadership, non-transactional leadership and the outcomes of leadership such as effort, effectiveness and satisfaction. The MLQ 5X items relate to nine latent constructs of leadership:- idealised influence (attributed), idealised influence (behaviour), inspirational motivation, intellectual stimulation, individual consideration,

contingent reward, management-by-exception (active), management-by exception (passive), and laissez-faire leadership.

## Within transformational leadership it considers five scales.

The strength of the articulation of the leader's vision is considered within Inspirational Motivation (IM). Inspirational leaders articulate, in simple ways, shared goals and mutual understanding of what is right and important. They provide visions of what is possible and to attain them. They enhance meaning and promote positive expectations about what needs to be done. This provides followers with a clear sense of purpose that is energising and ethical.

Idealised Influence (attributed) (IIA) reviews the charisma attributed to the leader. This scale is a measure of the trust and confidence of the followers of the leader based upon the perceptions of the leader focusing upon higher-order ideals and values.

The third scale is centred around Idealised Influence (behaviour) (IIB), emphasising a collective sense of mission and values based upon actions. This type of leader models appropriate behaviour for their followers using power only when necessary and never for personal gain.

Next Intellectual Stimulation (IS) includes challenging the assumption of followers' beliefs, their analysis of problems and the solutions they develop. It encourages followers to question their tried and true ways of solving problems. The leader does not criticise their mistakes, but they are encouraged to try out new approaches within a noblame culture

The fifth scale is centred upon Individual Considerations (IC). This scale is a measure of the leader's ability to consider individual needs of followers and the development of their inner strengths.

Three **transactional leadership scales** are also considered – contingent reward, active management by exception and passive management by exception. Transactional school leaders are often involved in 'day-to-day fire fighting' and this is often expected by staff

to support their own positions, and necessary to achieve short-term, annually agreed, student attainment targets. The criteria listed in section 1.2 (a) for schools facing challenging circumstances can result in a significant daily need to respond to these largely unforeseen situations. This leads the transactional leader to be orientated towards short-term goals and hard data. There is a focus on tactical issues rather than on missions and strategies for achieving them. There is a concern on 'treating' the problem rather than a focus upon preventing the problem. The strong transactional leader tends to work effectively within the current school system and within the current structures (including strong performance monitoring) to reinforce the short-term expectation.

Contingent Reward (CR) measures the strength of the behaviour focussed upon providing material or psychological rewards to followers for delivering clearly defined tasks

Active Management By Exception (MEA) whereby the leader watches and looks for deviations from standards and then, if appropriate, takes corrective actions to return to the standard.

The third transactional scale is to consider Management by Exception (passive) (MEP) whereby intervention only occurs after standards have not been met. It is an inactive monitoring of performance.

Finally, Passive Avoidant or Non-transactional leadership is a consideration of an even more passive approach which considers the degree by which leadership is absent, and is measured by a series of items aimed at identifying **laissez-faire leadership**. Associated with this style is the avoidance of corrective actions and limited decision making ability.

One of the strengths of using MLQ is that it is able to give a measurement of outcomes. These are defined as followers' Extra Effort (EEF), the Effectiveness of the leader's behaviour (EFF) and followers' Satisfaction (SAT) with their leader. The analysis of these different measurements of outcome is of central importance to the study given that the chosen schools have already been crudely separated out by a difference in examination performance.

## 3.3 (b) Reliability and Validity

Validity refers to the issue of whether an indicator (or set of indicators) that is designed to measure that concept really does measure the concept under study. Winter (2000) comments that the exact nature of 'validity' is a highly debated topic in both educational and social research since there exists no single or common definition of the term. He takes as his starting point for a discussion on definitions of 'validity' Hammersley's (1987) view that

'an account is valid or true if it represents accurately those features of the phenomena, that it is intended to describe, explain or theorise.' (Hammersley, 1987, p. 69)

Winter (2000) also comments that one of the most recurring features in critical discussions of 'validity' is the combination of 'validity' with the term 'reliability'. Lehner (1979) considers reliability to be the 'reproductibility of the measurement' (Lehner, 1979, p. 130). Winter (2000) suggests that the aggregated definition of 'validity' could be that of accuracy, and the definition of 'reliability' that of replicability.

It is important that the questionnaire consistently reflects the construct it is measuring. This was undertaken by the use of a split-half reliability test. Such tests, in their simplest form, involve randomly splitting the data into two. For this research, a score for each participant was calculated on one half of the scale and compared with the other half of the scale.. The scale is reliable if the score on both sides of the scale are the same or very similar.

Bryman (2004) comments that Cronbach's alpha is a commonly used test of internal reliability and a figure of 0.80 is typically employed as a rule of thumb to denote an acceptable level 'although many writers work with a slightly lower figure' (Bryman, 2004, p. 72).

Kline (1999), for example, notes that cut off point of .7 is more suitable, and that when dealing with psychological constructs, below .7 can realistically be expected because of the diversity of the constructs being measured.

Cortina (1993) and Grayson (2004) demonstrated that data sets with the same alpha can have very different structures, and concluded that alpha should not be used as a measure of one underlying factor or construct. This survey measures nine scales on behaviour and three scales on performance. Also, within each scale the number of items varies from two to four. The application of Cronbach's alpha to each scale, therefore was undertaken.

Cronbach (1951) suggested that if several factors existed then the formula should be applied separately to items relating to different factors.

In applying the formula, individual items were considered for deletion if, by their removal, Cronbach's alpha was increased in value. In so doing, the reliability of the questionnaire would be improved. Therefore, in chapter four, consideration of the findings on each scale commences with a calculation of Cronbach's alpha.

The Multifactor Leadership Questionnaire (MLQ) Form 5X has been investigated and demonstrated to have good internal consistency, reliability and construct validity (Bass and Avolio, 1993).

Bass and Riggio (2006) comment several different approaches have been used to confirm the reliability and validity of the MLQ. They consider that the MLQ scales have demonstrated good to excellent internal consistency, with alpha coefficients above the .80 level for all MLQ scales. This level of consistency demonstrating that the items within each of the MLQ scales hang together and seem to be measuring the same construct.

Bass and Avolio (2004) report reliability for the total items and each leadership factor scales ranging from .74 to .94.

The leadership constructs with respect to the relationship with performance have been confirmed in meta-analyses conducted by several researchers (Leithwood and Jantzi, 1999; Catanyag, 1995; Bass & Avolio, 1994; Gasper, 1992; Lowe, Kroeck and Sivasubramaniam, 1996).

Lowe, Kroeck and Sivasubramaniam (1996), for example, undertook a meta-analyses of data from 2873 to 4242 respondents supporting the correlation between each component of MLQ and effectiveness.

<u>Table 3.1 - Correlations with effectiveness in Public and Private Organisations</u>

	Sector			
Leadership	Public	Private		
Transformational				
Charisma-inspirational	.74	.69		
Intellectual stimulation	.65	.56		
Individual consideration	.63	.62		
Transactional				
Contingent reward	.41	.41		
Managing-by-exception	.10	02		

(Reproduced from Bass and Riggio, 2006, p. 26)

Gasper (1992) completed another meta-analysis of transformational and transactional leadership. For twenty studies the mean corrected transformational leadership correlated respectively .76, .71 and .88 with effectiveness, satisfaction and extra effort.

## 3.3 (c) MLO Statements

With the MLQ, respondents are asked to circle a number from 0-4 to measure their responses to 45 statements. This number indicates the extent of their agreement or disagreement with each statement. Responses are anonymous.

Not at all	Once in a	Sometimes	Fairly often	Frequently, if
	while			not always
0	1	2	3	4

The terms of the licence agreement from Mindgarden Inc. (See Appendices F) prevent the publishing of most the individual statements. However, for example, the MLQ statement:- 'The person I am rating provides me with assistance in exchange for my efforts' provides the opportunity for an attitudinal measured response. This statement is representative of 'Contingent Reward' and a high score represents a view that the leader is strong in this area. 44 similar statements enable the leader to be rated across the

range of nine leadership behaviours outlined above. The behaviours (eg, IM - inspirational motivator, CR - contingent rewarder) are not identified as such on the forms, and the item statements are, as in other types of psychometric testing, listed in a random order across the form. The response from the followers quickly enables a pattern of leadership strengths to be built up across each individual item and across each of the nine behaviours tested within the instrument. Scores of 4, for example, on the items relating to Inspirational Motivation and Contingent Reward would demonstrate that the headteacher was strong in aspects of both transformational and transactional leadership behaviours.

The returns from all eight schools give both a headteacher and teacher rating of the headteachers' leadership skills. High scores out of 4 on the scales designed to measure transformational and transactional leadership qualities demonstrate perceived strengths in these areas. If high scores are received in both areas, then a low score should be achieved for laissez-faire leadership as this assumes an absence of both.

The results from the raters/followers provide a means by which a comparison of the leadership traits and qualities across the schools can be made. For example, are there aspects of transformational leadership such as Inspirational Motivation that appear relatively stronger in the schools that have risen above their floor targets (in terms of 5 A\*-Cs)? Alternatively, do the faster moving schools demonstrate strengths in transactional leadership aspects?

The MLQ also measures three outcome components of the nine leadership behaviours: extra effort, effectiveness and satisfaction. The question of whether followers find themselves investing more effort than they thought they would is measured by extra effort. Items considering the raters' willing try harder and their desire to succeed are included within this scale. Effectiveness measures perceptions of how effectively the leader leads and the satisfaction measure is tested by items that assess the degree of satisfaction in the way in which the leader works.

The inclusion of outcome components gives an indication of the headteacher's ability to add value to the working life of the staff. The items used in the outcome measurement are crude, and as with all the statements they are open to different interpretations, and

are value laden. For example, one teacher's definition of 'effectiveness' will be very different from another, and what is 'satisfying' to one staff member may not be to another staff member. Gronn (1999) comments that it is not clear how followers are to be interpreted as responding to questionnaires. He believes that there is a real possibility that the followers are applying their own implicit theories of good or effective leadership when assessing the items. In effect, stating that all social and personal subjective phenomena are qualitative in essence and existence. Consequently, whilst the analysis investigates the perceptions of the follower with regard to the leader's influence on effort, effectiveness and satisfaction and compares views across the study schools, it does not use this data as evidence of school improvement.

#### 3.4 Critics of the Model

Transformational leadership has been extensively developed by research which is located primarily in non-educational settings. For over 20 years this research has primarily involved construction, analysis and refinement of the Multifactor Leadership Questionnaire (MLQ). The research of Bass (1985) and his colleagues is important for education as it has influenced the work of educationalists such as Leithwood who have adapted the model for educational settings. Whilst proving to be a useful tool, MLQ is not without its critics.

Both Gronn (1995) and Lakomski (1995) are critical of the methodological basis of transformational leadership research. Bass and Avolio's (2004) MLQ has been developed using well-established psychometric principles of test construction. Reviews of the MLQ in The Twelfth Mental Measurements Yearbook (Conoley & Impara, 1995), for example, endorse it as being a psychometrically sound instrument that can be used in both research and applied settings. Despite this apparent strength, Gronn (1995) criticises the work of Bass and his colleagues for relying on questionnaires. Bass & Avolio (2004) had already responded to such criticisms by noting the considerable development of their survey instruments and their use of other techniques to collect information (such as in-depth interviews and behavioural observations).

Lakomski's (1995) major methodological concerns are to do with knowledge justification. He highlights the problem of observation reports, for example, as the

method for establishing empirical adequacy in the deductive framework used by Bass, commenting that observation reports will vary across people. Lakomski (1995, p. 220) criticises the use of questionnaires to assess follower perceptions of leadership behaviour as not tapping into the respondents' mental processes and merely uncovering fabricated views of leadership that 'may or may not refer to something "real" in the world'.

As Leithwood and Jantzi(1996) suggest, leadership can be viewed as an attributional phenomenon, ie – 'in the eyes of the beholder'. Adopting this view means that techniques such as questionnaires are entirely appropriate as one does not have to attempt to uncover the underlying cognitive activity.

Leithwood and Jantzi (2005) assert that the concept and measurement of transformational leadership in schools has progressed far beyond the model guided by Bass's conception and using MLQ for data collection. The limitations of this approach need consideration. The data, for example, gives no indication of the variations in factors such as school context, the quality of the learning and teaching as these may well impact upon the variations of leadership practices and upon outcomes.

Avolio and Bass (2004) conclude that

'as with any leadership survey, there will always be some limitations that have been well-documented in the leadership literature. Cognisant of these limitations, we have set out over the last 20 year to provide the very best validation evidence for MLQ and .... We have seen a tremendous amount of consistency across raters, regions and cultures in terms of support for the nine factor full range model.' (Avolio and Bass, 2004, p. 80)

#### 3.5 Alternative Models

Leithwood and Jantzi (2005) comment that the vast majority of non-school empirical research into transformational leadership is restricted to measurements based upon Bass's (1985) work. They reviewed thirty-two published educationally based research studies into transformational school leadership between 1996–2005 and found that

seven were guided explicitly by Bass's (1985) model using some variation of MLQ. Eighteen of the studies used a set of transformational leadership behaviours that were a school specific instrument that largely subsumed and moved beyond Bass (1985). Of these eighteen, ten were Leithwood et al's own studies. Most of the studies reviewed tended to focus upon one transformational leadership behaviour and, as such, the approach was not applicable to this study.

However, nine of the studies were concerned with academic achievement, assessing the effects of transformational leadership on literacy, mathematics, other combined curriculum areas or on school performance. The methodologies adopted by these studies were considered as possible alternatives to the MLQ.

Ross, Hogaboam-Gray & Gray (2004) in considering leadership influences used a Likert scale survey across 141 Ontario schools. Fourteen of the twenty items used focused upon teacher efficacy. Using national and state test scores in maths and literacy as their dependent measures, Ross, Hogaboam-Gray & Gray (2004) reported significant positive effects of transformational leadership. Structural equation modelling (SEM) was used to process the data. SEM tests a theory using survey data. SEM is a very general, very powerful multivariate analysis technique that includes a number of other traditional analysis methods as special cases.

Leithwood, Jantzi & Steinbach (1999a) survey data from 1818 teachers and 6490 students demonstrated moderate total effects of leadership on student engagement. Two survey instruments were used to collect the data, one based on school and classroom conditions and the other on school leadership. The survey contained 270 items and was again based upon a 5-point Likert scale. SPSS was then used to aggregate individual responses by school and then to calculate means, standard deviations and reliability coefficients.

Unlike Leithwood, Jantzi & Steinbach (1999a) and Ross, Hogaboam-Gray & Gray (2004), Heck & Marcoulides's (1996) earlier study found non-significant effects of transformational leadership on student achievement. An initial five factor model was proposed focusing upon school culture and the leadership influences upon it.

Silins and Murray-Harvey (1999) had reported significant indirect relationships between transformational leadership and an end of high school examination score from five subjects. As part of a comprehensive and diverse sample, twenty teachers across forty-one South Australian secondary schools completed a two-part Leadership in School Questionnaire providing information on eight aspects of leadership and four school effects related to school performance. A path model was tested. A path analysis, which is an extension of SEM was then undertaken on the variables. Similar to other forms of regression analysis, path analysis is used to model relationships between variables, determine the magnitude of the relationships between variables, and can be used to make predictions based on the model. The variables used were school resources, school principal, staff being valued, leadership satisfaction, community focus, teacher learning/leadership, organisational learning and teachers work.

Griffith (2004) also reported positive effects by using a value-added measure of achievement calculated by averaging the performance progress on standardised test scores for students in each school. Griffith (2004) closely aligns with this study with two of his research questions being as follows:-

Do principals who display transformational leadership have school staff with higher levels of job satisfaction and higher-performing schools? and

Does principal transformational leadership relate directly or indirectly to school staff turnover and school performance?

Again, for both these questions a structural equation model was used.

The scale of the above studies far exceed this thesis and rely on a significant amount of composite data for their validity and reliability. Many of these studies also focus upon one or just some of the transformational leadership behaviours as identified by Bass (1985) or developed by Leithwood and Jantzi (2005).

Day, Harris & Hadfield's (2001) methodology was also considered because of its qualitative grounded theory approach. Similar to this study it also looked at leadership

from the viewpoint of staff. Of the 32 major studies reviewed by Leithwood and Jantzi (2005) only five were qualitative.

Day, Harris & Hadfield (2001) criticised many of the transformational leadership studies, for, as in this case, focusing too much on the role of the headteacher as the primary source of data. Day, Harris & Hadfield's (2001) sample were schools that had received positive OFSTED reports, performed better than other schools and had headteachers who were acknowledged as effective. As a qualitative study it undertook a significant number of interviews with a range of staff, parents and governors as well as three with the headteacher. The analysis followed a complex pattern of theory development and testing. The multi-perspective methodology adopted with the development of a new grounded theory, moves it away from the predominantly 'autobiographical' accounts of headteacher leadership, and focuses upon other possible explanations for above average student performances.

## 3.6 Choice of sample or survey population

The project was undertaken in eight English secondary schools facing challenging circumstances. For the purposes of the research they are listed alphabetically as schools AA – HH.

Secondary schools that the Department For Children, Schools and Families (DCSF) considers to be in circumstances that can be deemed challenging are those with 25% or fewer of the pupils achieving five or more grades GCSEs A\* - C or schools with more than 35% or more of pupils on free school meals.

Since September 2006, this criteria has been extended to include all secondary schools whereby 30% of their pupils failed to achieve 5A\*-Cs in 2006. To be considered for the project, all of the schools had to be below this benchmark of 30% for at least one year between the years of 2003 and 2006.

By 2006, four of the participating project schools had exceeded the 2006 floor target of 30% of pupils or more achieving 5A\*-Cs. Three of the project schools still remained below it and one school had fallen below it and not recovered. For the purposes of the

research those schools exceeding the floor target were grouped together and compared with the second group, and the relative strengths of leadership qualities displayed by both groups of headteachers were tested.

This distinction is important to the study as it seeks to explore the strengths of the behaviours within the two groups of school. Those schools now operating above the floor target of 30% are assumed to have been effective in raising student attainment levels, the second group are assumed to have been less effective, given that both had a similar starting base. Central to this study is an analysis of the results that can demonstrate stronger sets of behaviours in one of the two groups compared to the other. Using the attainment of 5 GCSE A\*-C as a measure of effectiveness is again crude, but it is a widely and publicly used benchmark, and is the main criteria labelling a secondary school as one facing challenging circumstances. As such it was deemed to be totally appropriate for this study. However, it is unfortunate that achieving schools are measured in this way. Using 'norm referenced' measures of performance and standards models mean that there will always be less successful schools. The multiple problems faced by schools facing challenging circumstances means that it is evitable that many of them will fall into this less successful category. As Englefield (2001) comments

'Many schools working in challenging contexts are well run and achieve success in spite of a considerable intake of pupils from homes suffering from various kinds of social disadvantage. Understanding the factors operating in successful schools in challenging circumstances and transferring the lessons is more likely to encourage improvement than an approach that involves unfair comparison'. (Englefield, 2001, p. 5)

For the eight schools, at some point in the three years prior to 2006 their 5A\*-C percentage total had been in the range of 15% - 25%. This put them all in the bottom ten percent of all secondary schools nationally in either 2003 or 2004 (DFES, Performance Tables 2006)

The national averages for all schools during the time period of 2003 - 2006 rose from 53% to 58% (5 GCSEs A\*-C).

Table 3.2 – Pilot School GCSE 5 A\*-C grades (2003-2006)

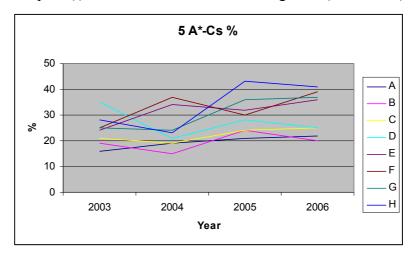
	2003	2004	2005	2006	Improvement
	5A*-C %	5A*-C %	5A*-C %	5A*-C %	(GCSE %)
					2003-2006
National	53	54	56	58	+5
Average					
AA	16	19	21	22	+6
BB	19	15	24	20	+1
CC	21	19	24	25	+4
DD	35	21	28	25	+4*
EE	24	34	32	36	+12
FF	25	37	30	39	+14
GG	25	24	36	37	+12
HH	28	23	43	41	+13

<sup>\*</sup> Between 2004 and 2006. (Source – DFES 2006 School Performance Tables)

From the Table 3.2 above, it can be observed that three schools (BB, CC, DD) failed to improve in line with national improvements and one school (AA) improved marginally ahead of the national rise in attainment over a three year period. The other four schools (EE, FF, GG, HH) demonstrated improvements at, close to or over, 2.5 times the national rate of improvement, therefore closing the gap between them and the national averages.

The two different rates of improvement meant that by 2006, Schools AA-DD had failed to achieve the 2006 floor target of 30% of their pupils achieving 5 or more GCSE grades at A\*-C. See Graph 3 (i).

Graph 3 (i) – Pilot School GCSE 5 A\*-C grades (2003-2006)



As stated, it is this distinction between slower improving schools (AA-DD) and faster improving schools (EE-HH) provides the opportunity for comparisons between the potential differences in leadership styles within both categories of school.

For study to have further credibility and reliability it was necessary that none of the above schools were subject to a formal OFSTED category of Special Measures, Serious Weaknesses, or had been formally served with a Notice to Improve during the period from September 2003 to July 2006, and that all the headteachers had been in post for that time. In addition, any published OFSTED or HMI report on the school during that time had to have judged those headteachers be at least satisfactory in terms of their leadership and management skills.

This criteria of low school attainment, and a headteacher in post since 2003 with a satisfactory or better OFSTED judgement meant that the potential number of case schools was significantly less than the approximate 480 schools currently facing challenging circumstances. Poor OFSTED reports or a change of headteacher removed over two thirds of the potential case schools. Local Authority reorganisation of schools and the Building Schools for the Future programme further reduced the availability of potential case schools. Nonetheless, the eight schools volunteering for the project all have strong 'facing challenging circumstances' criteria as outlined in Chapter 1 and listed in Table 3.3 below.

Table 3.3 Factors Determining a 'School Facing Challenging Circumstances'

Factors that determine if a secondary		BB	CC	DD	EE	FF	GG	НН
school is facing challenging								
circumstances								
	,	,	,	,	,	,	,	,
Results 5 A*-C below 30%		√		1	√			$\sqrt{}$
Above average levels of social								
deprivation				$\sqrt{}$				
Poor management	S	S	G	S	G	G	G	G
Budget deficit				$\sqrt{}$				

Chapter 5: Leading the Teaching and Learning - A Study of transformational leadership in secondary schools facing challenging circumstances - Graham Wright

Unsatisfactory buildings								
Above average % of pupils with a								
statement of Special Educational Need								
Pupils with below average levels of prior								
attainment								
A high proportion of transient pupils								
Above average rate of unauthorised								
absence								
Source – School's individual								
OFSTED Report (20xx)	06	05	06	04	03	06	06	07

 $<sup>\</sup>sqrt{\ }$  - Present within the school at the time of the last OFSTED report.

S – Satisfactory headteacher judgement

G – Good headteacher judgement

Pen portraits of each participating school are enclosed in Appendices (A). All eight schools therefore, sit well within the criteria set by the research design, and form a good base from which judgements about leaders facing challenging circumstances can be formed

#### 3.7 The Data Collection Process

Headteachers were initially contacted by telephone and a school based co-ordinator was identified to manage the process within each establishment. Each school was provided with one 'leader' questionnaire and 50 'rater' questionnaires with more questionnaires being available on request.

Seltzer and Bass (1990) discovered that despite the anonymous nature of the rater form, the followers were more likely to give the leader a positive assessment if the leader had initiated the dispersal of the forms. To avoid inflating the findings, a co-ordinator was suggested as important to maintain the study's reliability. Co-ordinators were asked to distribute the forms to a cross-section of teaching staff with a range of experience and responsibilities. These teachers were given two weeks to return the questionnaire to the co-ordinator in a self sealing envelope that has been provided by the researcher. The co-ordinator collected in the anonymous responses, along with that of the headteacher and they were then collected from the school by the researcher.

## 3.8 The Data Analysis Process

The data was then analysed using the Statistical Package for the Social Sciences (SPSS) with the findings underpinned by a range of parametric and non-parametric data analysis techniques that included Frequency Tables, Cross-tabulations, Chi-Square tests, Descriptives, Various T-Tests and Reliability Analysis.

#### 3.8 (a) Variables

Each respondent/rater was entered separately from each school producing 203 cases for analysis across 50 variables. 45 of the variables were a MLQ frequency. As stated earlier, in attempting to measure perceived leadership behaviours by the use of a Likert scale, respondents had the opportunity to express an opinion by indicating a degree of frequency ranging from 'not at all' to 'frequently, if not always'.

As Oppenheim (1992) comments,

'the most serious criticism levelled against this type of scale is its lack of reproductability (in the technical sense): the same total score may be obtained in many different ways. This being so, it has been argued that such a score has little meaning or that two or more identical scores may have totally different meanings. Often, for this reason, the pattern of responses becomes more interesting than the total score' (Oppenheim, 1992, p. 200)

Independent variables were also included so that various comparisons of response could be made. These additional variables were

- type of rater (headteacher; female teacher with more one year's service in the school; male teacher with more one year's service in the school; female teacher with less than one year's service in the school; male teacher with less than one year's service in the school; rater type unknown).
- ii) rate of school GCSE progress (Group 1 GCSE improvement moving in line with national rates of improvement; Group 2 GCSE improvement moving at

over two times the rate of national improvement and therefore closing the gap between themselves and the national averages).

- iii) rate of school GCSE progress expressed as a percentage.
- iv) rate of school progress expressed in terms of DFES cumulative value added data.
- v) size of school.

Frequency tables, produced by SPSS were able to clearly demonstrate differing patterns of response by providing the number of people and the percentage belonging to each of the categories for the variable in question.

Consideration of the MLQ items resulted in mean item scores being produced. A mean score close to 0 reflected the raters as not perceiving the headteacher to ever display the behavioural characteristic outlined in the item. A mean score close to 4 reflected the raters as frequently, if not always, displaying the characteristic outlined.

# 3.8 (b) Chi-Square – Testing the Null Hypothesis

Chi-square testing was applied to the responses to the variable statements. Chi-square tests calculate how well a series of numbered responses fit a distribution. By Chi-square testing, the frequencies observed in the 0-4 categories can be compared with the frequencies expected by chance. It tests a null hypothesis that the relative frequencies of occurrence of observed events follow a specified frequency distribution.

The null hypothesis is a hypothesis that is presumed true until statistical evidence in the form of a hypothesis test indicates otherwise. Chi-square testing enabled the researcher to demonstrate that there was a high probability that the responses received were not accidental. It gives a confidence interval which sets an upper and lower limit on the likelihood that the variation in the data was due to chance. Where there was not a high probability that the data was not due to chance, it is highlighted within the Chapter 4 findings.

Results were seen as statistically significant at the 5% level, meaning that there was less than 5 responses out of 100 whereby the result may have occurred by chance.

The value of the null hypothesis is that it can be rejected with high probability, while non-null hypotheses cannot be confirmed with high probability. If experimental observations contradict the prediction of the null hypothesis, it means that either the null hypothesis is false, or we have observed an event with very low probability. This gives us high confidence in the falsehood of the null hypothesis, which can be improved by increasing the number of trials.

Confirmation of a non-null hypothesis confirms only a difference in parameters; it does not provide support for the theory or principles from which the hypothesis was derived, since the difference could be due to one or more of many possible factors.

This analysis was particularly important in establishing any statistically significant relationships between individual items within each scale.

#### 3.8 (c) Inferential Statistics

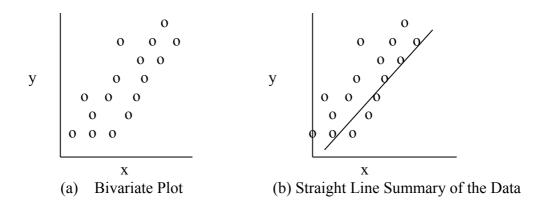
The research work tries to reach conclusions that extended beyond the immediate data. It 'infers', from the sample data, what the teacher population in challenging schools as a whole might think. Inferential statistics are used to make judgements of the probability that an observed difference between groups is a dependable one or, alternatively, one that might have happened by chance in this study. The use of inferential statistics enabled the researcher to make inferences from the data to more general conditions.

The inferential statistics used in the research form part of a family of statistical models known as the General Linear Model. These included the t-test, Analysis of Variance (ANOVA), and Analysis of Covariance (ANCOVA).

In simple terms, a General Linear Model attempts to fit a line through the data to summarise or describe accurately what is happening. For example, assume Graph 3 (ii) is a bivariate plot of two MLQ variables y= 'helps me to develop my strength' and x= 'works with me in a satisfactory way'. Y is a transformational leadership behaviour and X is a performance measurement of teacher satisfaction. The pattern in Graph 3 (ii) (a) shows a clear positive relationship between the variables because, in general, the

headteacher with the highest score of helping the teacher to develop their strength also has the highest score in working with the teacher in a satisfactory way.

## Graph 3 (ii) - Scatterplots



Graph (b), the bivariate plot, shows how the data might be best summarised. The straight line through the "cloud" of data points would effectively describe the pattern in the bivariate plot. Although the line does not perfectly describe any specific point (because no point falls precisely on the line), it does accurately describe the pattern in the data. Where a line is fitted to the data in this way it is know as a linear model and the line is often referred to as a 'regression line' with the analysis known as 'regression analysis'.

Without the use of inferential statistics, it would not be possible to summarise or describe accurately what is happening in the data from the research.

A central theme of Chapter four is to test mean scores. Independent T-tests were used because they assess whether the means of two different groups (For example, the two group categories of headteachers) are statistically different from each other.

Analysis of variance (ANOVA) was used to explore situations with several independent variables and Analysis of covariance (ANCOVA) measured the relationship between variables and the outcomes.

#### 3.8 (d) Gender and School Size Differences

Analysis by gender is particularly important as Avolio & Bass (2004) comments that whilst age, race and ethnicity are unrelated to MLQ results, female leaders tend to score higher in transformational and lower in transactional leadership than their male counterparts.

Each of the participating schools was analysed in a similar way to identify if any relationships existed or if patterns could be established between all schools or between those schools in the two different categories.

The size of each participating school was also considered to examine if there were differences in staff perceptions in small schools compared to large schools.

#### 3.8 (e) Bass and Avolio (2004) Comparisons

The variable items in the MLQ identify and measure key leadership and effectiveness behaviours that have been shown in previous research (Bass & Avolio, 2004) to be strongly linked with both the individual leader's and organisational success. As a consequence descriptive statistics for MLQ 5X taken from the 2004 Normative Sample compiled by Avolio and Bass (2004) are compared with the individual school and the two differing groups of school. This 2004 sample represents an overview of nearly 3400 cases and, as such, provides a good base for comparison.

#### 3.8 (f) Effective Leadership Styles

SPSS further analyses the collapsed item variables that are presented as twelve leadership scales (Nine representing the leadership styles of transformational, transactional and laissez-faire behaviours) and three of the scales representing outcome measures.

The nine leadership scales are measured by four separate, yet highly inter-correlated, items. These four items are as low in correlation as possible with the items measuring the other eight key areas. Sets of highly correlated results between items measuring the same behaviours should emerge from the study. This is to be expected and does not need investigation although it does add to the survey's internal validity.

Few leadership research instruments include both leadership and outcome scales. The inclusion of both allows the researcher to compare leadership with performance outcomes. For schools this relationship can at best be only indirect as it is the students not the staff who produce the performance outcomes, but these indirect outcomes can be significant (Leithwood & Jantzi, 1999 & 2004, Silins and Murray-Harvey, 1999), and inform the discussion on the key question of whether any assessment of the headteachers' leadership influence, relative to student outcomes, can be considered.

With the nine leadership scales, mean scores in excess of 3 and up to 4 indicate particular strengths in transformational or transactional leadership behaviours. There should be an inverse relationship between these scores and laissez-faire behaviours. The higher the transformational and/or transactional leadership score, the lower the laissez-faire score. These relationships are considered between the individual schools and the two main groups of school.

## 3.8 (g) Headteacher Participation

Supplementing the analysis is a comparison of the headteacher's leadership behaviours as perceived by themselves and their followers. Lakomski (1995), as outlined above, criticises the use of questionnaires to assess follower perceptions of leadership behaviour as the respondents' may have a fabricated view of leadership that may or may not refer to something real. Overlaying the headteacher's view of themselves on the raters perceptions adds to the reliability of the study by triangulating the data, thereby leading to greater confidence in the findings – if there is a strong correlation between the two. Secondly, the correlation of the headteachers rating of themselves with their followers offers insights into the relationship between each other. Across the eight schools this may provide additional information to justify any patterns that emerge.

#### 3.9 Piloting the Research

#### 3.9 (a) Validity and Reliability

By using an existing research tool, the MLQ has already undergone over twenty years of reliability and validity scrutiny. This would suggest therefore that the piloting of the

questionnaire has already taken place and is not necessary. The leadership constructs with respect to the relationship with performance may have been confirmed, however, additional piloting can only add to its validity. As Oppenheim (1992) comments

'everything about a questionnaire should be piloted; nothing should be excluded, not even the typeface or the quality of the paper'. (Oppenheim, 1992, p. 48).

The piloting was undertaken in two schools. One school had seen its results decline (Pilot school A:- 24% 5 A\*-Cs in 2003, 21% - 2006) and the other had seen a large increase in its GCSE results since 2003 (Pilot school B:- 23% 5 A\*-C in 2003, 36% - 2006). There was a good response rate from both schools with 65 forms returned from pilot school A and 39 forms returned from pilot school B. The aim of the pilot was increase the questionnaire's reliability, validity and practicability. As a pilot, respondents were asked not only to rate the items on the form, but to comment on the clarity of the questionnaire items, the instructions and on the layout. The pilot questionnaire proved to be very informative in terms of changing the design.

#### 3.9 (b) Lessons from the Pilot.

First, opportunities to acquire school contextual data were missing from the pilot forms, yet one of the key questions centred upon leadership behaviours requiring modification to fit individual school contexts. The gender of the headteachers and size of school had both been cited in existing studies as factors likely to impact upon the strengths of transformational behaviours

Secondly, one of the factors when considering whether a measure is reliable is stability. Is the measure being employed, the MLQ, stable over time? Will it return similar results over time? It is likely that headteachers demonstrate both transformational and transactional behaviours, with some behaviours being more intense than others depending upon the school situation. For example, the need to write a detailed Bid in a short time period for some significant additional funding or the preparation for an OFSTED inspection may result in higher levels of transactional leadership behaviours for a certain time period. There are fluctuations. To minimise this on the rater form, both the leader and the staff rater need to have worked together over a significant length

of time, so that these fluctuations can balance out. The pilot was not able to distinguish between staff who had just arrived and staff who had experienced working with the headteacher over time. The revised form was able to do this.

Thirdly, the rater forms asked the respondent for a best description of them. Were they a senior school leader, middle school leader, supporting staff, teacher or other? In both the pilot schools a significant minority of the respondents chose not to identify themselves. Where they did, there were too few senior leaders to draw any conclusions, and an analysis of the data in both schools demonstrated no significant differences in the perceptions of middle leaders and teachers. There was a high corrolation between the perceptions of all identified categories of staff responding in full to the pilot. The main issue with the respondents was the relatively high number of supporting staff, who tended not to rate all of the items. As a result all non-teaching staff were taken out of the main study. The main study was therefore modified to include only teachers, however, gender and length of time working in the school were added to test for for experience and gender differences.

Another change stemming from the pilot was the wording of some of the items. Lack of understanding of the meaning of the items probably contributed to both the pilot headteachers scoring more lowly on transformational scales than may have been the case. For example, one statement focused upon teaching and coaching was wrongly taken by some to mean that the headteacher spent part of the week in the classroom teaching. It was intended to assess the headteacher's leadership strengths in coaching and developing individual and group members. Another item measuring the effectiveness of the headteacher's ability to represent the raters was so ambiguous that it was left by a significant number of staff in both schools and, therefore, needed replacing with a more specific school related item on the effectiveness of representation.

The greatest benefit from the pilot was the opportunity to try out the coding and classification system for the data analysis. The SPSS data outcomes were cross-checked against an Excel database to confirm the outcomes of the various scales assessing the transformational, transactional and laissez-faire behaviours.

## 3.9 (c) Strengthening Validity and Reliability

References stressing the need for the study to be valid and reliable appear at several points within this chapter. For the research to be valid, the indicator, must measure what the researcher wishes to measure. The indicator adopted is the leading instrument used to assess transformational leadership behaviours. By taking it in its non-specific form (not adapted for education), the researcher is adopting a tool that has been refined and developed for this purpose for over twenty years.

The piloting of an already proven instrument and the triangulation of the data though the use of a 'leader' form heighten the study's internal validity by further reducing any factors that may prevent the research findings from accurately representing the phenomena under investigation.

For the study to be reliable it needs to measure the same results on different occasions. The study centres upon people's perceptions and opinions. As can be seen from any Opinion Poll views can change significantly and quickly. To enhance the likelihood of consistency over time, a Likert Scale was adopted. Oppenheim (1992) comments that the reliability of Likert scales is good, and that they tend to perform very well when an ordering of peoples' attitudes are required. Secondly, only teachers with a direct relationship to the headteacher who have been working with the leader for over a year have been considered, enabling them to form an opinion based upon that reasonably lengthy working relationship. New teachers to the school were identified, however, only in two of the eight cases were there a sufficient number to consider if their view matched those of their colleagues.

Further reliability comes from the number of respondents. MLQs have been used with as little as three staff rating a leader. The pilot study demonstrated consistency of response well before every followers' form had been processed. As the focal point is on the headteacher, a pattern of behavioural strengths across a 5 point scale can be quickly acquired. The pilot demonstrated that once 15-20 responses had been processed the pattern was unlikely to change with points on the scale becoming increasingly fixed. Bass 2004 comments that

'there is more variability in MLQ ratings of a designated leader as the number of the leader's raters increases. Consequently, when using the MLQ with larger numbers of raters per leader, the mean and the range of ratings should be carefully reviewed' (Bass, 2004, p. 13).

# 3.10 Presentation of the findings

In summary, this study represents research into the effective leadership styles of headteachers in schools facing challenging circumstances. It takes, as its starting point, the view that headteachers displaying transformational leadership behaviours are well positioned to lead on whole school improvement.

Teaching staff from eight secondary schools facing challenging circumstances have been surveyed with regard to the transformational leadership behaviours of their headteacher. For four schools, school improvement (measured in terms of the percentage of pupils gaining 5 GCSE A\*-C) has been significant. For the others, there has been little improvement against this measure. If our starting position is accurate, headteachers in the first set of schools should demonstrate stronger transformational leadership behaviours than in the second set of schools.

The methodology outlined above provides information to afford some insight into the following key questions:-

What are the effective leadership skills and qualities of the headteachers in the study?

Can any assessment of their influence, relative to student attainment be considered?

Do their skills match those of a transformational leader?

Can a set of leadership behaviours be identified as a model for similar schools in challenging circumstances?

The following chapter presents the results of the analysis, explaining and justifying those results. The findings are then reflected upon in Chapter five.

# Leading the Teaching and Learning - A study of transformational leadership in secondary schools facing challenging circumstances.

#### **CHAPTER 4 – FINDINGS**

#### 4.1 Introduction

The findings outlined below result from a research design that tests the hypothesis that transformational headteacher leadership is effective in raising standards of attainment within secondary schools facing challenging circumstances. The findings and analysis are original and intended to supplement the current debate with regard to the following key research questions. They are:-

What are the effective leadership skills and qualities of the headteachers in the study?

Can any assessment of their influence, relative to student attainment be considered?

Do their skills match those of a transformational leader?

Can a set of leadership behaviours be identified as a model for similar schools in challenging circumstances?

A discussion under each of these headings resulting from the findings forms the main part of Chapter 5.

The format of this chapter is to consider each of nine leadership scales separately and compare the findings between the two groups of school.

At the end of both sections on the transformational and transactional leadership scales an assessment of the findings against school performance is undertaken along with a consideration of gender and school size differences in the reported data.

## **4.2 Respondents**

Table 4.1 outlines the numbers of respondents from each school participating in the research and answering the MLQ. For Avolio and Bass (1999) over the last 25 years, the MLQ has been the primary tool by which they have been able to reliably differentiate highly effective from highly ineffective leaders. For them, the number of raters evaluating a single leader has varied in size from three to ten or more. Avolio and Bass (2004) state that

'except for a minimum of three raters, no specific optimal size for the rater group can be suggested for evaluating a single leader'. (Avolio and Bass, 2004, p.13).

For Avolio and Bass's (2004) review of 3375 studies, the average number of respondents per study was eight.

To ensure a consistency of response from this study a minimum number of 15 questionnaire returns were asked of each participating school. Only teachers and headteachers participated in the actual research programme. Having made revisions resulting from the pilot studies, other staff were not included. The teacher responses are broken down by gender and experience (Table 4.1).

Table 4.1 - Respondents

School	Head-	Female	Male	Female	Male	Unknown	TOTAL
	teacher	+1 year	+1 year	-1 year	-1 year		
AA	1	8	6	1	0	0	16
BB	1	9	10	0	0	0	20
CC	1	15	3	0	0	0	19
DD	1	20	10	0	0	4	35
EE	1	20	12	1	0	5	39
FF	1	18	4	0	0	0	23
GG	1	14	4	3	0	0	22
HH	1	17	7	3	1	0	29
TOTAL	8	121	56	8	1	9	203

Avolio, Bass and Yammarino (1988) comment that when using the MLQ with larger numbers of raters per leader, the mean and the range of ratings need to be carefully reviewed, as it leads to greater variability in the MLQ ratings.

A minimum of 64% of the respondents were female and 100% of the headteachers were male. The majority of the respondents (a minimum of 91%) had over one year's experience in the school (nine respondents did not declare their experience or gender). This provided a satisfactory base with most of the respondents having had an opportunity to experience the headteacher's leadership qualities over time. The number of respondents with less than one year's experience in the school was low, and only in two of the eight project schools (each with a minimum number of three respondents) was it possible to review the perceptions of teachers new to the school compared to the established teachers that had experienced the headteachers' leadership behaviours over time (although the numbers were too few for any conclusions to be drawn).

The 'raters' referred to throughout this chapter are all the teaching staff that responded to the MLQ. The headteachers are considered separately.

# **4.3 Reliability Analysis**

SPSS analysis was undertaken to validate the questionnaire. The scales used needed to consistently reflect the construct they were measuring. Cronbach's alpha tested the results for internal reliability. All 45 variable items were tested producing a computed alpha coefficient of 0.91 (Appendices B).

Table 4.2 - SPSS Output Summary - Reliability Statistic on Variables 1 - 45

Cronbach's	
Alpha	N of Items
.910	45

With the summary of table 4.2 showing .91, this was taken to represent an acceptable level of internal reliability. Grayson (2004) had demonstrated that it is possible for relatively high reliability to be attained from two or more uncorrelated factors. Cronbach (1951), Cortina (1993) and Grayson (2004) all conclude that Cronbach's alpha should be applied separately to the items within each scale. Consideration,

therefore, of each behavioural scale in this chapter precedes with an assessment of the reliability of the items relating to the scale. Ideally, each leadership scale should be measured by four highly inter-correlated items that are low in correlation with the items of the other eight scales, and have a Cronbach alpha coefficient of at least 0.70 and, hopefully, over 0.80.

Descriptive statistics for MLQ 5X giving a 2004 normative sample compiled by Avolio and Bass (2004) (See Appendices C) used the data from 27285 raters of 3375 leaders. These 3375 studies were based upon on average eight raters per study, compared to between fifteen to thirty-eight raters per school in this thesis. This data from Avolio and Bass (2004) is used for comparison purposes throughout the study.

# 4.4 Headteacher Leadership Characteristics in Challenging Schools

The MLQ statements were designed to test the strength of the leadership behaviours of the headteachers across the eight project schools. Frequency of behaviour (See Table 4.3) was measured across a 0-4 range with 4 being the strongest. Within the chapter, the words in bold in the MLQ Coding of Frequency (Table 4.3) have been used to describe the strength of the perceived headteacher behaviours.

Table 4.3 - MLQ Coding of Frequency

MLQ	Frequency						
Score							
0	the headteacher <b>never</b> displayed this leadership behaviour						
1	the headteacher <b>seldom</b> displayed this leadership behaviour						
2	the headteacher <b>sometimes</b> displayed this leadership behaviour						
3	the headteacher fairly often displayed this leadership behaviour						
4	the headteacher frequently, if not always, displayed this leadership behaviour						

The Descriptive Statistics giving a summary of the mean item scores are shown in Appendices D. Appendices D represents the ratings of all staff across all eight schools. The standard deviation has been taken as the measure of distribution of the frequencies. Avolio and Bass (2004) commented that this distribution was likely to be higher with a larger number of cases. Their standard deviation ranged from 0.72 - 0.94. The range of response in this thesis is from 0.90 - 1.39.

From Appendices D an overview into the leadership behaviours of a range of satisfactory and good headteachers (judgements based on their latest school OFSTED report) who are leading schools facing challenging circumstances can be gained. Tables 4.4, 4.5 and 4.6 are based upon the mean scores and standard deviation from Appendices D. The mean item scores enable the strongest frequencies of leadership attributes of all of the headteachers in the study to be identified. The strongest attributes are presented in Table 4.4. (The attributed statements have been generalised for publication purposes due to the licence agreement with Mind Garden Inc and the use of the MLQ 5X in this thesis.)

<u>Table 4.4 - Strong Behaviours of Headteachers in the Project Schools\*.</u>

Mean	Quest.	Statement theme centred upon
3.06	36	Goals
3.03	34	Mission
2.99	13	Communications
2.96	23	Moral and ethical decision making
2.95	26	Vision

<sup>\*</sup> Headteachers' ratings not included.

Sample N = 195

All five of the strongest statements represent the possible power of transformational leadership characteristics. Three (out of a possible total of four) of the variables form part of the scale 'Inspirational Motivation' (IM) and the other two (of four) variables form part of the 'Idealised Influence - Behaviour' (IIB) scale. Table 4.5 show the MLQ variable items that had the lowest mean scores in terms of the frequency with which they were identified by the raters.

Table 4.5 - Behaviours of headteachers in the project schools seldomly reported\*

Mean	Quest.	Statement theme centred upon
0.76	5	Avoidance of action
0.80	7	Absence
0.82	20	Inaction
0.85	12	Reaction to problems
0.99	33	Responding to issues

<sup>\*</sup> Headteachers' ratings not included.

Sample N = 195

These five statements reflect three (out of a possible total of four) laissez-faire qualities and two (of four) passive management by exception qualities (transactional). As such, none represent transformational leadership qualities.

Table 4.6 lists the statements with the biggest standard deviations. The standard deviation is an average of the distribution by which all the values differ from the mean. The bigger the standard deviation, the bigger the deviation, therefore, the greater the dispersion of values across all eight schools. As is demonstrated later, the standard deviation is not as great in individual schools, particularly those in the faster achieving schools, yet across all eight schools the responses varied greatly. Two of these four statements represent Individual Consideration (IC) qualities that are representative of transformational leadership behaviours.

<u>Table 4.6 – Variables with the Greatest Dispersion Levels\*</u>

Standard Deviation	Quest.	Statement theme centred upon
1.406	19	Staff treatment
1.362	35	Relationship with staff
1.355	3	Inaction
1.355	29	Staff needs

<sup>\*</sup> Headteachers' ratings not included. Sample N = 195

This initial assessment of the descriptive statistics (See Appendices D) would suggest, not surprisingly, that the responses would appear to be rejecting various laissez-faire and passive management leadership behaviours. Of note, however, is the suggestion that the strongest responses reflect headteacher behaviours that are focussed upon motivating team members and that of modelling appropriate ethical and moral codes of conduct. Each scale is considered in detail below.

# 4.5 Transformational Leadership Behaviours

For a school to be achieving, the headteachers would display relatively high scores across all five transformational leadership behaviour scales. The five distinct transformational leadership behaviours are considered in detail below.

# **4.6 Idealised Influence (Attributed) (IIA)**

Idealised Influence (Attributed) (IIA) measures the degree by which staff wish to be professionally associated with the headteacher. Variables 10, 18, 21 and 25 measured this scale.

<u>Table 4.7 - SPSS Output - Reliability Statistics for IIA</u>

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
10 IIA	7.90	7.968	.592	.364	.646
18 IIA	7.46	8.656	.534	.294	.681
21 IIA	7.82	8.984	.462	.214	.721
25 IIA	7.64	8.836	.548	.310	.674

Cronbach's alpha = .74

At 0.74 (Table 4.7) Cronbach's alpha was considered to represent a satisfactory measure of reliability with relatively high correlations. Reliability would not be strengthened by the removal of any variable statement.

Chi-square testing was applied to all the responses to the variable statements. Statistical significance was assumed at the 0.05 level. It tested the null hypothesis that the relative frequencies of occurrence of observed events follow a specified frequency distribution. Simply, for the null hypothesis to be rejected, the observed distribution should be significantly different from the expected distribution.

Table 4.8, for example, considers the frequency of responses to the IIA variable 'displays a sense of power and confidence'. From 191 responses the null hypothesis expects 38.2 responses in each of the response options. The residuals demonstrate a variation in the observed responses from -24.2 to +29.8. From the individual category responses the Chi-square value is calculated. Basically, this is a calculation of the differences between the observed and expected values for each cell and a summing up of those differences.

<u>Table 4.8 – SPSS Output – Variable 25 (IIA) Frequency</u>

	Observed N	Expected N	Residual
Never	14	38.2	-24.2
Seldom	21	38.2	-17.2
Sometimes	36	38.2	-2.2
Frequently	68	38.2	29.8
Always	52	38.2	13.8
Total	191		

The resulting value in this example (Table 4.9) is 51.435. This value is compared with a distribution table of known properties. Where the df (degree of freedom – number of

categories being tested minus one) is 4, the distribution table, states that a Chi-square value of 13.28 is likely only one in a hundred samples (p = .001). Given the value for variable 25 is 51.435 (much higher than 13.28), the outcome is significant with p = .000. This makes it possible to reject the null hypothesis and state the differences recorded are real and would appear again in similar samples.

<u>Table 4.9 – SPSS Output - Chi-Test Statistics (Variable 25)</u>

	25 IIA
Chi- Square(a,b,c)	51.435
df	4
Asymp. Sig.	.000

In all four variable statements relating to IIA the expected frequencies and the observed frequencies showed differences large enough to reject the null hypothesis (Table 4.10). Appendix E lists the full results of the testing including the frequencies of response.

<u>Table 4.10 - SPSS Output – Chi-square test statistics for IIA</u>

	10 IIA	18 IIA	21 IIA	25 IIA
Chi- Square(a,b,c)	15.637	72.978	28.450	51.435
df	4	4	4	4
Asymp. Sig.	.004	.000	.000	.000

# 4.6 a) Differences between Group 1 and Group 2 schools (IIA)

Group 2 schools (those achieving twice the national increase in terms of 5 A\*-C percentages) scored higher means that the Group 1 schools (those schools achieving at, or below, the national increase in terms of 5A\*-C percentages).

The Independent t-test of the collapsed IIA variables into one IIA transformational scale shows a large difference in means between the two groups – Group 1 - 2.1076 compared to Group 2 - 3.0972 (Table 4.11).

<u>Table 4.11 - SPSS Output - T-test</u>

#### **Group Statistics**

	Rate of achievement (1 not closing on nat aver, 2 closing on nat aver)	N	Mean	Std. Deviation	Std. Error Mean
C2 IIA (Transformational)	1	86	2.1076	.87156	.09398
	2	109	3.0972	.82596	.07911

Levene's Test for Equality of Variance demonstrates a significance of .824 (Table 4.12). Parametric statistics require equal variances and the Levene test is one way of identifying whether the variances are equal or not. It does this by considering whether

<u>Table 4.12 - SPSS Output – Test of Homogeneity of Variances</u>

C2 IIA (Transformational)

Levene Statistic	df1	df2	Sig.
.050	1	193	.824

or not there is a significant difference between the two variances. If there is a significant difference this is indicated by a probability at or below p=0.05 and the variances are assumed not to be equal. At p=0.824 (Table 4.12), there is a high probability that the two variances can be considered to be equal, and the populations under consideration can be assumed to be approximately normally distributed. Given the assumption of an approximate normal distribution of the populations, one-way ANOVA enables a comparison of the two samples to be made. Table 4.13 shows

the main ANOVA summary. With Sig at .000 there is a very low possibility of these results appearing by chance making it possible to reject the null hypothesis.

Table 4.13 - SPSS Output - ANOVA

C2 IIA (Transformational)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	47.086	1	47.086	65.734	.000
Within Groups	138.247	193	.716		
Total	185.332	194			

Table 4.14 t-test results demonstrate that with all four IIA variables, the means are larger and the standard deviations smaller in the Group 2 schools compared to the Group 1 schools.

<u>Table 4.14 – SPSS Output - Independent T-Test for IIA – Group Statistics (Raters)</u>

	Rate of achievement (1 not closing on nat aver, 2 closing on nat aver)	N	Mean	Std. Deviation	Std. Error Mean
10 IIA	1	81	1.75	1.347	.150
	2	101	2.84	1.102	.110
18 IIA	1	83	2.45	1.373	.151
	2	103	3.10	1.005	.099
21 IIA	1	82	1.68	1.226	.135
	2	109	3.06	.931	.089
25 IIA	1	86	2.14	1.219	.131
	2	105	3.06	1.017	.099

The smaller standard deviation values in the Group 2 schools show that the teacher raters have a greater consistency of response that is not present to the same degree in the Group 1 schools.

Table 4.14 demonstrates that in the view of their teaching staff Group 1 headteachers are not as strong as the Group 2 headteachers in any of the variables associated with attributed idealised influences. These variables measured the degree by which the teachers felt pride in being associated with the headteacher. They measured the extent by which the headteacher was seen to go beyond self interest for the good of the group and act in ways that built up teacher respect for the headteacher. The display of headteacher power and confidence was also seen to be greater in the Group 2 headteachers.

With the mean scores ranging from 2.84 - 3.10 for the Group 2 headteachers, the majority of the teachers reported that they fairly often noted IIA characteristics.

## 4.6 b) Headteacher Assessments of IIA

The means comparison for the groups of headteachers ratings of themselves (Table 4.15) shows a difference between their views and their staff. For the Group 1

headteachers, they slightly overrate themselves for variable 10, yet greatly overrate themselves on the other three variables.

The staff mean scores ranging from 1.75 - 2.45, do not support the Group 1 headteachers' views with the higher range from 2.00 - 3.50 (Table 4.15).

<u>Table 4.15 – SPSS Output - Group Statistics (Heads)</u>

Rate of achievement (1 not closing on nat aver, 2					
closing on nat aver)		10 IIA	18 IIA	21 IIA	25 IIA
1	Heads - Mean	2.00	3.50	3.00	2.75
	N	4	4	4	4
	Rater - Mean	1.75	2.45	1.68	2.14
	N	81	83	82	86
2	Heads - Mean	2.50	3.25	2.75	2.75
	N	4	4	4	4
	Rater Mean	2.84	3.10	3.06	3.06
	N	101	103	109	105

The opposite, however, applied to the Group 2 headteachers. Apart from variable 18 where they are close to the staffs' perception (3.10 staff, 3.25 heads), they underrate themselves compared to the staff with lower mean scores.

Table 4.16 - Comparison of Headteacher Scores (IIA) with Rater Mean Scores

Schools (1 - 8)		10 IIA	18 IIA	21 IIA	25 IIA
AA	Head Score	2.00	4.00	4.00	3.00
Group 1	Mean - Staff	1.20	1.57	1.33	1.93
BB Crown 4	Head Score	3.00	3.00	3.00	2.00
Group 1	Mean - Staff	1.95	2.28	2.21	2.53
CC Croup 1	Head Score	2.00	4.00	3.00	3.00
Group 1	Mean - Staff	1.29	2.94	1.88	2.06
DD Croup 1	Head Score	1.00	3.00	2.00	3.00
Group 1	Mean - Staff	2.17	2.64	1.42	2.06
EE	Head Score	3.00	3.00	3.00	2.00
Group 2	Mean - Staff				
		2.94	3.03	3.05	2.84
FF	Head Score	2.00	2.00	2.00	3.00
Group 2	Mean - Staff	3.23	3.38	3.27	3.68
GG Group 2	Head Score	3.00	4.00	3.00	3.00
Group 2	Mean - Staff	2.79	3.11	3.00	3.85
i					l

 $Chapter \ 5: \ Leading \ the \ Teaching \ and \ Learning \ -A \ Study \ of \ transformational \ leadership \ in \ secondary \ schools \ facing \ challenging \ circumstances \ -Graham \ Wright$ 

НН	Head Score	2.00	4.00	3.00	3.00
Group 2	Mean - Staff	2.46	2 96	2 93	2 23

Table 4.16 illustrates the extent of the difference between the raters and the headteachers perceptions of the headteachers' behavioural strengths related to IIA. With headteacher scores of 3 equating to 'fairly often' displaying these characteristics, and headteacher scores of 4 equating to 'frequently if not always' displaying these characteristics, there is a large difference in views between staff and headteachers particularly in Group 1 schools. In thirteen cases out of sixteen the Group 1 headteachers overrate themselves. This compares to only three cases out of sixteen for the Group 2 headteachers.

A non-parametric Mann-Whitney test enables the differences between the two groups of headteachers to be considered. The Mann-Whitney test ranks the data from the lowest to the highest, ignoring the group to which a participant belongs. The lowest score is ranked 1. If there is no difference in the groups then both will contain a similar number of high and low ranks and the sum totals should be similar.

<u>Table 4.17 – SPSS Output - Mann-Whitney Test – Headteacher IIA</u> **a)** Ranks

	Rate of achievement (1 not closing on nat aver, 2			
	closing on nat aver)	N	Mean Rank	Sum of Ranks
10 IIA	1	4	3.75	15.00
	2	4	5.25	21.00
18 IIA	1	4	4.75	19.00
	2	4	4.25	17.00
21 IIA	1	4	4.88	19.50
	2	4	4.13	16.50
25 IIA	1	4	4.50	18.00
	2	4	4.50	18.00

## b) Test Statistics(\*)

	10 IIA	18 IIA	21 IIA	25 IIA
Mann-Whitney U	5.000	7.000	6.500	8.000
Wilcoxon W	15.000	17.000	16.500	18.000
Z	949	316	500	.000
Asymp. Sig. (2-tailed)	.343	.752	.617	1.000

<sup>\*</sup> Grouping Variable: Rate of achievement (1 not closing on nat aver, 2 closing on nat aver)

For variable 10, centred upon the pride of the teaching staff in being associated with the headteacher, Group 2 headteachers ranked themselves higher than the Group 1 headteachers. This situation was reversed for variables 18 and 21, whereby the Group 1 headteachers ranked more highly in terms of the extent with which they considered themselves to go beyond self interest and build up staff respect.

Section (b) of Table 4.17 outlines the significance value of the test by giving the two-tailed probability that the statistics are a chance result. With Sig. Ranging across the variables from 0.343 - 1.000 the test is not significant.

#### 4.6 c) Idealised Influence (Attributed) – Summary

Teaching staff raters in all the project schools were able to identify characteristics of attributed idealised influence with their headteacher's behaviour.

All headteachers demonstrated some ability to display power and confidence, to get their staff to have some pride through their mutual association, and to go beyond self interest for the good of the school.

The slower achieving headteachers in schools facing challenging circumstances overrated the strength of their IIA behaviours.

The faster achieving headteachers were reported to display relatively stronger IIA behaviours in response to every IIA variable. They also appeared to underrate the strength of the IIA behaviours that they displayed.

## 4.7 Idealised Influence (Behaviour) (IIB)

Four statement variables (6, 14, 23 and 34) were designed to test the degree by which the headteacher can be counted upon to take the right action, and to demonstrate high standards of ethical and moral behaviour.

At .731 Cronbach's alpha was considered to represent a satisfactory measure of reliability with relatively high correlations. Reliability would not be strengthened by the removal of any item (See Table 4.18).

Table 4.18 - SPSS Output - Reliability Statistics for IIB

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
6 IIB	8.73	6.589	.458	.213	.707
14 IIB	8.63	6.094	.546	.312	.656
23 IIB	8.47	6.597	.519	.275	.673
34 IIB	8.38	6.097	.565	.338	.645

Cronbach's alpha = .731

Chi-square testing was applied to all the responses to the variable statements with statistical significance assumed at the 0.05 level. This equates to a chi-square value of 9.49 (df = 4). With chi-square (Table 4.19) ranging from 69.821 - 112.740, the expected frequencies and the observed frequencies showed differences large enough to reject the null hypothesis with p = less than 0.001. Appendix E lists the full results of the testing including the frequencies of response.

<u>Table 4.19 - SPSS Output – Chi-square test statistics for IIB</u>

	14 IIB	23 IIB	34 IIB	6 IIB
Chi- Square(a,b,c,d)	69.821	109.869	112.740	74.200
Square(a,b,c,d) df	4	4	4	4
Asymp. Sig.	.000	.000	.000	.000

Overall, the raters (all the teachers responding, excluding the headteachers) scored the headteachers higher on IIB attributes than on IIA behaviours. The strength of the scoring can be demonstrated by considering the collapsed scales in the t-test (Table 4.20) below.

<u>Table 4.20 - SPSS Output - Paired Sample Test on Idealised Influence Ratings</u>

#### a) Paired Samples Statistics

Chapter 5: Leading the Teaching and Learning - A Study of transformational leadership in secondary schools facing challenging circumstances - Graham Wright

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	C2 IIA (Transformational)	2.6608	195	.97741	.06999
	C3 IIB (Transformational)	2.9103	195	.83010	.05944

b) Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 C2 IIA (Transformational) & C3 IIB (Transformational)	195	.746	.000

#### c) Paired Samples Test

Paired Differences					t	df	Sig. (2- tailed)	
	Mean	Std. Deviation	Std. Error Mean	Interva	onfidence al of the rence			
				Lower	Upper			
C2 IIA - C3 IIB	24949	.65894	.04719	34255	15642	-5.287	194	.000

The mean score on IIB of 2.9103 from the raters suggests the headteachers overall are strong in this area. Table 4.20 highlights the high degree of correlation between the two transformational behaviours and with p<.001 the results are significant.

Table 4.21 further highlights the relatively high scoring. Adapted from the Frequency Tables (See Appendices E) there are a high number of responses that consider the headteachers display IIB characteristics fairly often compared to the frequencies observed for IIA.

<u>Table 4.21 – Frequency of strong IIB characteristics of headteachers</u>

Variable item	Often or always	Variable item	Often or always
IIA	displaying this	IIB	displaying this
	characteristic (MLQ		characteristic (MLQ
	scores 3 or 4)		scores 3 or 4)
18 IIA	68.0%	34 IIB	75.5%
25 IIA	62.1%	23 IIB	73.8%
21 IIA	52.2%	14 IIB	64.8%
10 IIA	46.8%	6 IIB	62.5%

Sample N = 195

Comparisons of the mean results (Table 4.22 – Adapted from the Descriptive Statistics) show that six of the eight headteachers (CC – GG) had a relatively strong influence

(>2.5) through the behaviour that they displayed. All six recorded results (ranging from 2.69 - 3.31).

Table 4.22 – SPSS Output - School Means IIB

Schools		Q6	Q14	Q23	Q34	Total
AA	Mean	2.00	2.07	2.13	2.00	2.05
BB	Mean	2.26	2.61	2.63	2.37	2.47
CC	Mean	2.88	2.22	2.83	2.82	2.69
DD	Mean	3.27	2.32	3.03	2.97	2.90
EE	Mean	2.32	3.11	3.19	3.18	2.95
FF	Mean	2.64	3.45	3.52	3.64	3.31
НН	Mean	3.05	3.62	2.95	3.63	3.31
GG	Mean	2.61	2.52	2.89	3.19	2.80

This compared to the Descriptive Statistics for MLQ 5X 2004 Normative Sample (See Appendices C) with the mean on the Normative Sample being 2.77. These six schools are also ranked 1-6 in terms of raising the GCSE outcomes. This suggests, overall, that the challenging schools headteachers are relatively strong in this area, particularly the faster achieving headteachers.

Table 4.23, a one-way ANOVA, was applied on the individual schools for each IIB variable.

<u>Table 4.23 – SPSS Output – IIB - One-way ANOVA – Individual Schools</u>

a) Test of Homogeneity of Variances

<u>u,</u>		.,		
	Levene Statistic	df1	df2	Sig.
6 IIB	2.242	7	184	.033
14 IIB	4.962	7	185	.000
23 IIB	1.447	7	183	.189
34 IIB	2.061	7	176	.051

# b) ANOVA

D) AITO						
		Sum of Squares	df	Mean Square	F	Sig.
6 IIB	Between Groups	30.170	7	4.310	3.834	.001
	Within Groups	206.824	184	1.124		
	Total	236.995	191			
14 IIB	Between Groups	51.479	7	7.354	6.786	.000
	Within Groups	200.490	185	1.084		
	Total	251.969	192			

Chapter 5: Leading the Teaching and Learning - A Study of transformational leadership in secondary schools facing challenging circumstances - Graham Wright

2	3 IIB	Between Groups	21.498	7	3.071	3.155	.004
		Within Groups	178.166	183	.974		
		Total	199.665	190			
34	4 IIB	Between Groups	41.418	7	5.917	5.773	.000
		Within Groups	180.387	176	1.025		
		Total	221.804	183			

Although the One-way ANOVA (b) shows the findings to be significant, Levene's test for equality of variance (a) demonstrates that equal variances cannot be assumed. Table 23 (a) suggests that there is a high probability that two variances cannot be considered to be equal (6 and 14). Caution, therefore is required as the school populations under consideration cannot be assumed to be normally distributed.

# 4.7 a) Differences between Group 1 and Group 2 schools (IIB)

As with Idealised Influence (Attributed), Idealised Influence (Behaviour) ratings by the teachers were higher with the Group 2 heads than with the Group 1. As can be seen from Table 4.24 both groups had similar mean scores for variable 6 (Talks about important values and beliefs), but Group 2 heads had higher mean scores on all the other three variables. The greatest differences were to be found in responses to both sense of purpose and collective sense of mission. Both were seen as greater in Group 2 heads (Variables 14 and 34).

Also, as before, the standard deviation was smaller in all the Group 2 schools suggesting a greater consistency of response.

<u>Table 4.24 – SPSS Output - Means Report for IIB Variables</u>

	Rate of achievement (1 not closing on nat aver, 2 closing on nat aver)	N	Mean	Std. Deviation	Std. Error Mean
6 IIB	1	84	2.74	1.173	.128
	2	108	2.60	1.067	.103
14 IIB	1	85	2.32	1.246	.135
	2	108	3.13	.918	.088
23 IIB	1	85	2.74	1.135	.123
	2	106	3.13	.895	.087
34 IIB	1	82	2.62	1.183	.131
	2	102	3.36	.910	.090

As Table 4.25 shows, overall, the Group 2 headteachers were scored similar for both of their Idealised Influence attributes (both Attributed and Behaviour) IIA – 3.0972, IIB – 3.1055.

Group 1 headteachers, however were seen as relatively stronger in their IIB characteristics compared to IIA (IIA – 2.1076, IIB – 2.6628). Due to Group 1 headteachers being perceived to be stronger in IIB than IIA characteristics, overall the IIB results were higher (2.9103 compared to 2.6608) than those reported for IIA.

<u>Table 4.25 – SPSS Output - Means Comparison</u>

Rate of achievement (1 not closing on nat aver, 2 closing on nat aver)		C2 IIA (Transform ational)	C3 IIB (Transform ational)
1	Mean	2.1076	2.6628
	N	86	86
	Std. Deviation	.87156	.87680
2	Mean	3.0972	3.1055
	N	109	109
	Std. Deviation	.82596	.73857
Total	Mean	2.6608	2.9103
	N	195	195
	Std. Deviation	.97741	.83010

#### 4.7 b) Headteacher Assessments of IIB

The mean results for the headteachers ratings of themselves (Table 4.26) show that they consider that they are relatively strong in demonstrating these behaviours with the headteacher means ranging from 2.75 - 3.50. This relative strength is reflected in both groups and supported by their staff. All the Group 1 headteachers again overrated themselves compared to their staff. The Group 2 headteachers underrated themselves in response to three of the four variables other than variable 6 centred upon communicating values and beliefs.

<u>Table 4.26 – SPSS Output - Group Statistics (Heads)</u>

Rate of achievement (1				
not closing on nat aver, 2				
closing on nat aver)	6 IIB	14 IIB	23 IIB	34 IIB

Chapter 5: Leading the Teaching and Learning - A Study of transformational leadership in secondary schools facing challenging circumstances - Graham Wright

1	Head - Mean	3.00	3.00	3.25	3.50
	N	4	4	4	4
	Rater - Mean	2.74	2.32	2.74	2.62
	N	84	85	85	82
2	Head - Mean	3.25	3.00	3.00	2.75
	N	4	4	4	4
	Rater - Mean	2.60	3.13	3.13	3.36
	N	108	108	106	102

All the headteachers, therefore, recognised themselves as displaying relatively strong behaviours that demonstrated their consideration of moral and ethical issues and their desire to support the common view.

# 4.7 c) Idealised Influence (Behaviour) – Summary

Teaching staff raters in all the project schools were able to identify characteristics of idealised influence - behaviour with their headteacher.

The slower achieving headteachers in schools facing challenging circumstances displayed relatively stronger IIB attributes than IIA ones, and, overall, overrated the strength of their IIB behaviours.

The faster achieving headteachers often displayed IIB behaviours, and overall, slightly underrated the strength of their IIB behaviours.

Idealised Influence (Behaviour) was seen to be displayed more often in challenging schools than Idealised Influence (Attributed) behaviours. It was also displayed more often in challenging schools than in other organisations (compared to Avolio and Bass, see Appendices C).

# 4.8 Inspirational Motivation (IM)

Inspirational Motivation (IM) measures the headteachers' ability to sell the school vision of the future to colleagues so that they will follow. Table 4.4 above demonstrated that the variables associated with the headteachers' ability to motivate came out strongly on the part of all staff across the eight project schools.

Table 4.27 - SPSS Output - Reliability Statistics for IM

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
9 IM	8.98	6.412	.538	.294	.704
13 IM	9.34	5.648	.536	.288	.705
26 IM	9.40	5.623	.579	.341	.678
36 IM	9.27	5.980	.551	.307	.694

Cronbach's alpha = .753

In considering the reliability of the IM data, at .753 Cronbach's alpha was considered to represent a satisfactory measure of reliability with relatively high correlations.

Reliability would not be strengthened by the removal of any item (Table 4.27).

Chi-square testing was applied to all the responses to the variable statements. In all four variable statements relating to IM the expected frequencies and the observed frequencies showed differences large enough to reject the null hypothesis (Table 4.28). Appendix E lists the full results of the testing including the frequencies of response.

Table 4.28 - SPSS Output - Chi-square test statistics for IM

	9 IM	13 IM	26 IM	36 IM
Chi- Square(a,b,c,d)	218.995	104.337	95.891	129.269
df	4	4	4	4
Asymp. Sig.	.000	.000	.000	.000

As appendices D illustrates, variables 9, 13, 26 and 36, all part of the Inspirational Motivation scale scored relatively highly across the project schools. Overall, variable (9) – 'talks optimistically about the future' had the highest mean score of the thirty-six behaviour variables rated by the teacher respondents. In seven of the eight schools it was either the 1<sup>st</sup> or 2<sup>nd</sup> highest scoring statement (See Table 4.29).

<u>Table 4.29 - Rank Order of Behavioural Statements (in terms of highest mean scores - out of a total of 36)</u>

School	Variable 9	Variable 13	Variable 26	Variable 36
AA	1	4	12	5
BB	1	3	2	11
CC	2	10	9	6
DD	1	8	6	2
EE	1	3	6	5
FF	2	1	10	3
GG	1	3	2	7

HH | 8 2 5 | 9

All the variables associated with Individual Motivation ranked highly within and across the project schools. As Table 4.29 demonstrates (data taken from Appendices D – Descriptive Statistics), IM variables produced relatively high mean scores within all eight schools (ranking no lower than 12 out of 36 in School AA), and in three schools they produced the top three highest mean scores of the thirty-six rated (BB, FF, GG).

# 4.8 a) Differences between Group 1 and Group 2 schools (IM)

As the t-test below (Table 4.30) demonstrates, Group 2 headteachers are considered by their teaching staff (in terms of higher mean scores) to have relatively stronger transformational leadership qualities in terms of inspiring and motivating them compared to Group 1. This is consistent with the returns from IIA and IIB, whereby Group 2 headteachers were seen to be stronger in these transformational attributes. Also, mirroring both the Idealised Influence behaviours, Group 2 standard deviation is smaller. Both means, however, are higher than the means either Group scored for IIB and IIA.

Levene's test for equality of variances is non-significant (.013), therefore equality of variance cannot be assumed, although at p=<0.001 the t-test is able to reject the null hypothesis to state that the differences between the groups is unlikely to be as a result of chance.

<u>Table 4.30 – SPSS Output - T-Test for IM – Group Statistics (Raters)</u>

a) Group Statistics

	Rate of achievement (1 not closing on nat aver, 2 closing on nat aver)	N	Mean	Std. Deviation	Std. Error Mean
C1 IM (Transformational)	1	86	2.7674	.82853	.08934
	2	109	3.3853	.64776	.06204

b) Independent Samples	Test		_					
	for Equ	e's Test uality of ances	t-test for equality of means					
	F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	

 $Chapter \ 5: \ Leading \ the \ Teaching \ and \ Learning \ -A \ Study \ of \ transformational \ leadership \ in \ secondary \ schools \ facing \ challenging \ circumstances \ -Graham \ Wright$ 

C1 IM	Equal variances assumed	6.251	.013	-5.845	193	.000	61788	.10570
	Equal variances not assumed			-5.680	157.859	.000	61788	.10877

As table 4.31 demonstrates, of the variables making up the IM scale, both Groups of headteachers were rated highly on their ability to talk optimistically about the future variable 9 (Group 1 - 3.26, Group 2 - 3.45).

Group 2 scored consistently highly across all the other three variables (Range from 3.26 - 3.45). The biggest difference between the Groups was with the responses to variable 13 centred upon the headteachers' ability to enthusiastically communicate what was needed to be done. Again Group 2 headteachers were rated much higher.

Overall, the range of means across the variables (from 2.95 - 3.36) were relatively high and demonstrated that the headteachers across both Groups were relatively strong in these motivational behaviours.

<u>Table 4.31 – SPSS Output - Group Statistics (Heads)</u>

Rate of achievement (1 not closing on nat aver, 2					
closing on nat aver)		9 IM	13 IM	26 IM	36 IM
1	Mean	3.26	2.42	2.55	2.79
	N	86	86	85	84
	Std. Deviation	.996	1.212	1.180	1.173
2	Mean	3.45	3.45	3.26	3.29
	N	109	108	108	105
	Std. Deviation	.822	.778	.890	.805
Total	Mean	3.36	2.99	2.95	3.06
	N	195	194	193	189
	Std. Deviation	.906	1.117	1.084	1.014

The average of the four staff rated means (in Table 4.31) of the faster achieving group of headteachers equates to 3.36. At this level it represented strong transformational leadership qualities in this area. This figure is higher than the average figure of 2.92 detailed by Avolio and Bass (2004) Descriptive Statistics based on 3375 studies (See Appendices C).

## 4.8 b) Headteacher Assessments of IM

The mean and sum of the ranks from Mann-Whitney testing of the headteachers' responses again shows that the Group 1 headteachers tend to rate themselves higher on their transformational leadership skills than did the Group 2 headteachers. From Table 4.32 below, only with one variable (13) did the Group 2 headteachers produce a ranking that was higher. Although reported, with the asymptotic significance ranging from p= 0.127 – 0.617, it was not possible to reject the null hypothesis, therefore the results have to be taken with some caution. However, it does appear to further establish the trend seen in the IIA and IIB data that the Group 1 headteachers viewed themselves as stronger transformational leaders than those in Group 2.

Table 4.32 – SPSS Output – Mann-Whitney Analysis – Headteachers IM

a)	Ranks

a) Italiks				
	Rate of achievement (1 not closing on nat aver, 2			
	closing on nat aver)	N	Mean Rank	Sum of Ranks
9 IM	1	4	5.25	21.00
	2	4	3.75	15.00
13 IM	1	4	4.13	16.50
	2	4	4.88	19.50
26 IM	1	4	5.50	22.00
	2	4	3.50	14.00
36 IM	1	4	5.63	22.50
	2	4	3.38	13.50

#### b) Test Statistics(\*)

	9 IM	13 IM	26 IM	36 IM
Mann-Whitney U	5.000	6.500	4.000	3.500
Wilcoxon W	15.000	16.500	14.000	13.500
Z	949	500	-1.528	-1.375
Asymp. Sig. (2-tailed)	.343	.617	.127	.169
Exact Sig. [2*(1-tailed Sig.)]	.486	.686	.343	.200

<sup>\*</sup> Grouping Variable: Rate of achievement (1 not closing on nat aver, 2 closing on nat aver)

As Table 4.33 illustrates, this is not supported by their staff. The headteachers in schools AA and BB significantly overrated their motivational qualities compared to the view of their teaching staff (Table 4.33). The staff in school AA rated the IM qualities of the headteacher as 2.38, whilst the headteacher scored himself at 3.5. For BB, the overall staff rating was 2.61 compared to the headteachers' own rating of 3.75. Despite the overrating, both sets of staff (in schools AA and BB) considered inspirational

motivation (IM) to be their headteachers' strongest transformational quality. The heads in schools CC and DD were close to matching their own staffs' view.

Three of the four headteachers EE - HH, all of whom represent the schools in Group 2, tended to underestimate their transformational influences on their teaching staff, whilst the other was very close.

Table 4.33- Comparison of Headteacher Scores (IM) with Rater Mean Scores

Schools (1 - 8)		9 IM	13 IM	26 IM	36 IM	Average
AA	Mean - Head	4.00	3.00	3.00	4.00	3.50
	- Staff	3.20	2.33	1.80	2.20	2.38
ВВ	Mean - Head	4.00	4.00	3.00	4.00	3.75
	- Staff	3.05	2.58	2.74	2.05	2.61
СС	Mean - Head	3.00	2.00	3.00	2.00	2.50
	- Staff	2.83	2.22	2.22	2.61	2.47
DD	Mean - Head	3.00	3.00	3.00	4.00	3.25
	- Staff	3.62	2.47	2.97	3.59	3.16
EE	Mean - Head	3.00	4.00	3.00	3.00	3.25
	- Staff	3.55	3.38	3.14	3.33	3.35
FF	Mean - Head	3.00	3.00	2.00	3.00	2.75
	- Staff	3.77	3.82	3.32	3.59	3.63
GG	Mean - Head	4.00	3.00	3.00	3.00	3.25
	- Staff	2.79	3.11	3.00	3.85	3.19
НН	Mean - Head	2.00	3.00	2.00	2.00	2.25
	- Staff	2.75	3.00	2.93	2.93	2.90

In summary, their ability to motivate teachers was a relatively strong quality of all of the headteachers, and relative to the other transformational characteristics explored to date, this relative strength in behaviour is supported by the teacher raters.

# <u>4.8 c) Inspirational Motivation – Summary</u>

All of the headteachers in schools facing challenging circumstances displayed stronger IM attributes than other transformational leadership behaviours and all talked

optimistically about the future and their vision. Most headteachers were seen to be relatively strong in displaying IM behaviours.

In the schools where the IM behaviours were not seen to be as strong as in other schools, they were still seen to be displayed more frequently than other transformational leadership characteristics.

Most of the headteachers in the faster achieving group underestimated their inspirational motivation attributes and all were seen to have strong IM attributes.

Inspirational Motivation was displayed more often in challenging schools than other forms of leadership behaviours and displayed more often in challenging schools than in other organisations (Avolio and Bass, 2004, Appendices C),

## 4.9 Intellectual Stimulation (IS)

Intellectual Stimulation (IS) measures those behaviours by staff that increase their understanding of the problems that the school faces in achieving the school targets and vision. Transformational leaders stimulate their followers' efforts to be innovative and creative by questioning assumptions, reframing problems, and approaching old situations in new ways. Variables 2, 8, 30 and 32 were a test of this key area.

A test of the reliability on the IS variables produced a Cronbach alpha of .709 (See Table 4.34).

Table 4.34 - SPSS Output - Reliability Statistics for IS

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
2 IS	6.91	8.335	.407	.238	.696
8 IS	7.25	7.272	.499	.324	.644
30 IS	7.50	6.275	.629	.449	.556
32 IS	7.42	6.942	.461	.352	.671

At .709 Cronbach's alpha was considered to represent a satisfactory measure of reliability. Reliability would not be strengthened by the removal of any item.

Chi-square testing was applied to all the responses to the variable statements. In all four variable statements relating to IS the expected frequencies and the observed frequencies

showed differences large enough to reject the null hypothesis (Table 4.35).

Table 4. 35 - SPSS Output – Chi-square test statistics for IS

	2 IS	8 IS	30 IS	32 IS
Chi- Square(a,b,c,d)	81.419	53.680	36.043	32.333
df	4	4	4	4
Asymp. Sig.	.000	.000	.000	.000

# 4.9 a) Differences between Group 1 and Group 2 schools (IS)

Analysis of Variance (Table 4.36) between the two groups of school and the Intellectual Stimulation variables show that it is not possible to reject the null

<u>Table 4. 36 - SPSS Output - One-way ANOVA - IS Rater Assessments</u>

		Sum of Squares	df	Mean Square	F	Sig.
2 IS	Between Groups	1.089	1	1.089	1.096	.297
	Within Groups	167.905	169	.994		
	Total	168.994	170			
8 IS	Between Groups	18.298	1	18.298	14.927	.000
	Within Groups	225.552	184	1.226		
	Total	243.849	185			
30 IS	Between Groups	23.647	1	23.647	16.421	.000
	Within Groups	256.330	178	1.440		
	Total	279.978	179			
32 IS	Between Groups	8.839	1	8.839	5.574	.019
	Within Groups	279.116	176	1.586		
	Total	287.955	177			

hypothesis for variable 2 based upon the headteacher examining critical assumptions. With p ranging from <0.001-0.019 on the other variables, it is not likely that these assessments would have come about by chance making it possible to reject the null hypothesis in these cases.

As can be seen from Table 4.37, the impact of the headteachers on the intellectual stimulation of their staff was relatively lower than the other transformational scales considered to this point. The strongest results were recorded in response to the statement that the headteacher re-examines critical assumptions to question whether they are appropriate (variable 2).

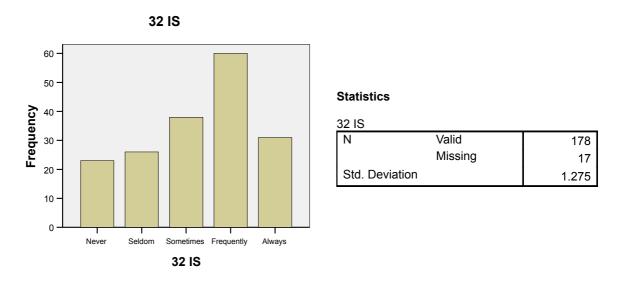
As Table 4.37 shows, the Group 1 mean scores were again below those of Group 2 (the faster achieving group). The mean scores (See Table 4.37) of the raters and the standard deviation suggest an inconsistency of response particularly from Group 1

<u>Table 4.37 – SPSS Output - Means for IS – Group Statistics (Raters)</u>

Rate of achievement (1 not closing on nat aver, 2					
closing on nat aver)		2 IS	8 IS	30 IS	32 IS
1	Mean	2.69	2.10	1.82	2.04
	N	75	84	83	81
	Std. Deviation	1.127	1.199	1.308	1.418
2	Mean	2.85	2.73	2.55	2.48
	N	96	102	97	97
	Std. Deviation	.882	1.026	1.099	1.110
Total	Mean	2.78	2.44	2.21	2.28
	N	171	186	180	178
	Std. Deviation	.997	1.148	1.251	1.275

schools. Variable 32, for example, (See Graph 4 i) with a standard deviation of 1.275 suggests that there is a large dispersal of mean scores with some staff frequently

<u>Graph 4 (i) – Distribution of Rater Scores – Variable 32</u>



assessing that the headteacher suggests new ways of looking at how to complete work whilst others say that the headteacher seldom does, if ever. This inconsistency is further highlighted by the frequency statistics accompanying the graph that show 17 teachers (nearly 9% of all respondents) unable to assess this variable.

As Table 4.37 shows, this inconsistency was greater across the Group 1 schools, however, it was present across both groups of the schools.

The Group 1 mean scores ranged from 1.82 - 2.69. In particular, there was a weak response to the statement that the headteachers get the staff to look at problems from many different angles. For Group 2 headteachers, whilst the findings continued to suggest that their transformational leadership skills were stronger than the Group 1 heads, they too produced relatively low means (mean scores ranged from 2.48 - 2.85). Their weakest rating being concerned with the degree of suggestions that they made to looking at how to achieve assignments. When the individual mean scores are averaged out (See Table 4.38) across the four variables, all of the eight schools have scores that are below the average of the Avolio and Bass (2004) statistics (Appendices C) based on 3375 studies.

Table 4.38 - Aggregated Mean Rater Scores for IS

Group 1	2.17
Group 2	2.65
Avolio and Bass (2004)	2.77

Group 1 N = 86; Group 2 N = 109; Avolio & Bass N = 3 375.

## 4.9 b) Headteacher Assessments of IS

The headteachers across both groups (Table 4.39) over-estimated their qualities in terms of the intellectual stimulation that they provide for their staff (in comparison with the teacher responses, Table 4.37). One headteacher in Group 2 (HH) underestimated their strength, whilst the others scored in excess of their raters' means. Headteachers AA and GG gave themselves far greater scores than those attributed to them by their staff.

<u>Table 4.39 – SPSS Output - Descriptive Statistics – Headteachers ratings of IS</u>

	N	Minimum	Maximum	Mean	Std. Deviation
2 IS	8	2	4	2.88	.835
8 IS	8	2	4	3.00	.535
30 IS	8	2	4	2.75	.707
32 IS	8	2	3	2.75	.463
Valid N (listwise)	8				

## 4.9 c) Intellectual Stimulation – Summary

The slower achieving headteachers in schools facing challenging circumstances are perceived to have relatively weak IS attributes (compared to both Avolio and Bass, 2004, see Appendices C and the Group 2 headteachers). The slower achieving headteachers also overrate the strength of their IS behaviours.

The faster achieving headteachers are relatively strong in displaying IS behaviours. However, as a group they do not often get their staff to look at problems from different angles. Neither are they as strong as other organisational leaders in displaying IS attributes (Avolio and Bass, 2004, Appendices C). Also, similar to the Group 1 headteachers, they overrated the strength of their IS behaviours.

The evidence suggests that Intellectual Stimulation is not as strong in challenging schools as behaviours associated with Inspirational Motivation and Idealised Influence.

## 4.10 Individual Consideration (IC)

Individual Consideration (IC) was the final transformational quality to be considered. IC measures the extent by which the headteacher treated followers as individuals and how much mentoring orientation the headteacher had for the teaching staff. The reliability of the related variables was again tested (Table 4.40)

Table 4.40 - SPSS Output - Reliability Statistics for IC

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
15 IC	6.85	11.676	.065	.020	.784
19 IC	6.15	7.658	.494	.296	.539
29 IC	6.67	7.278	.599	.487	.458
31 IC	6.49	7.306	.626	.551	.441

Cronbach's alpha = .652

At .652 Cronbach's alpha was considered to represent an unsatisfactory measure of reliability. Item 15 'Spends time teaching and coaching' had a very low correlation with the other items. There is a possibility that the teacher raters assumed this to mean that the headteacher spent time in the classroom teaching, rather than spent time with followers coaching them. To strengthen the reliability of the study, this item has been deleted and a further consideration of how this may have occurred is undertaken in Chapter 5.

The deletion of this item returns a Cronbach alpha of .784, and this was considered to represent a satisfactory measure of reliability.

Chi-square testing was applied to all the remaining responses to the IC variable statements. In the three variable statements relating to IC the expected frequencies and the obtained frequencies showed differences large enough to reject the null hypothesis (Table 4.41).

<u>Table 4.41 - SPSS Output – Chi-square test statistics for IC</u>

	19 IC	29 IC	31 IC
Chi- Square(a,b,c) Df	32.220	16.978	12.638
Df	4	4	4
Asymp. Sig.	.000	.002	.013

Analysis of the Variance of the remaining three variables related to Individual Consideration (Table 4.42) across the eight schools demonstrates that it is possible to reject the null hypothesis.

<u>Table 4. 42 - SPSS Output – One-way ANOVA – IC Rater Assessments</u>

		Sum of Squares	df	Mean Square	F	Sig.
19 IC	Between Groups	105.289	7	15.041	10.186	.000
	Within Groups	270.239	183	1.477		
	Total	375.529	190			
29 IC	Between Groups	42.189	7	6.027	3.611	.001
	Within Groups	293.790	176	1.669		
	Total	335.978	183			
31 IC	Between Groups	58.881	7	8.412	5.603	.000
	Within Groups	270.226	180	1.501		
	Total	329.106	187			

Relative to the other four sets of variables making up the transformational leadership scales, as Tables 4.42 demonstrates, the raters' mean scores were relatively low. Based on the Descriptive Statistics (See Appendices D) of the 19 transformational leadership behaviours assessed, the three IC means were ranked no higher than 12/19 with the remaining two at the bottom of the rankings.

<u>Table 4.42 – SPSS Output – Descriptive Statistics on IC Variables</u>

	N	Mean	Std. Deviation	Ranking (out of 19)
40.10				- /
19 IC	191	2.53	1.406	12
29 IC	184	2.01	1.355	19
31 IC	188	2.19	1.327	18
Valid N (listwise)	179			

Variable 29, 'Considers me as having different needs, ability and aspirations from others' and variable 31, 'Helps me to develop my strengths' produced mean scores just in excess of 2 (2.01 and 2.19). As is discussed in both chapters 3 and 5, Individual Consideration is seen as a key behavioural trait if the whole organisation is to engage in the change process and bring about sustainable long term improvements. The relatively low scoring, particularly in relation to other transformational behaviours perceived to be displayed, suggests a focus by the headteachers on the need for immediate

improvements rather than on medium or long term change. This assumption, however, was not tested and other explanations can be applied.

The standard deviation (Table 4.42) also shows a large dispersal of the data across the 0 – 4 range, and is in excess of the inconsistencies reported in the previous section on Intellectual Stimulation. This implies a selectivity on the part of the headteacher that may not be random, but focused towards those staff with the potential capacity to develop and support school development. Again, this explanation is not tested and requires further investigation elsewhere.

#### 4.10 a) Differences between Group 1 and Group 2 schools (IC)

This Independent t-test below (Table 4.43) of IC and the other transformational leadership behaviours show that the mean scores were relatively low. For both Groups 1 and 2 the mean scores for IC are lower than for any other transformational behaviour scale. The mean comparisons of the two Groups show that equality of variance can be assumed in each case other than for IM. The low p-values for this test (less than 0.001) means that there is evidence that the difference in the two means for each scale are statistically significant.

<u>Table 4.44 – Independent T-Test – Transformational Leadership Behaviour Ratings</u>

a) Group Statistics

	Rate of achievement (1				
	not closing on nat aver, 2				Std. Error
	closing on nat aver)	N	Mean	Std. Deviation	Mean
C1 IM (Transformational)	1	86	2.7674	.82853	.08934
	2	109	3.3853	.64776	.06204
C2 IIA (Transformational)	1	86	2.1076	.87156	.09398
	2	109	3.0972	.82596	.07911
C3 IIB (Transformational)	1	86	2.6628	.87680	.09455
	2	109	3.1055	.73857	.07074
C4 IS (Transformational)	1	86	2.3140	.98084	.10577
	2	109	2.8876	.99098	.09492
C5 IC (Transformational)	1	86	1.7645	.91262	.09841
	2	109	2.6835	.88037	.08432

b) Independent Samples 1	est	
	Levene's Test for Equality of Variances	t-test for equality of means

Chapter 5: Leading the Teaching and Learning - A Study of transformational leadership in secondary schools facing challenging circumstances - Graham Wright

	F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference
Equal variances assumed	6.251	.013	-5.845	193	.000	61788	.10570
Equal variances not assumed			-5.680	157.859	.000	61788	.10877
Equal variances assumed	.050	.824	-8.108	193	.000	98969	.12207
Equal variances not assumed			-8.056	177.856	.000	98969	.12285
Equal variances assumed	3.342	.069	-3.825	193	.000	44271	.11573
Equal variances not assumed			-3.749	165.891	.000	44271	.11808
Equal variances assumed	1.174	.280	-4.032	193	.000	57366	.14229
Equal variances not assumed			-4.037	183.416	.000	57366	.14211
Equal variances assumed	1.355	.246	-7.121	193	.000	91895	.12904
Equal variances not assumed			-7.091	179.487	.000	91895	.12960

A breakdown by school (Table 4.44) illustrates some very weak scores (<2) in the Group 1 schools (AA – DD) for IC. For these results to have been generated, the majority of the colleagues responding to the variable statements have commented that they seldom, or never, feel individually considered.

Headteacher HH in Group 2 also scores relatively lowly at 2.37. The greatest difference between the two groups is in response to variable 19 'Treats me as an individual rather than just a member of a group'. Most of the staff responding in the Group 2 schools felt positive about this statement with an aggregate mean at 3.07, compared to the Group 1 raters with a mean score of just 1.85.

<u>Table 4.44 – SPSS Output - Rater Mean Scores for IC by Individual School</u>

Schools (1 - 8)		19 IC	29 IC	31 IC	Average Mean
AA	Mean	1.40	1.14	1.13	1.22
ВВ	Mean	2.16	1.67	1.63	1.82
CC	Mean	1.72	1.22	1.39	1.08
DD	Mean	1.94	1.82	2.09	1.95
EE	Mean	3.37	2.24	2.54	2.72
FF	Mean	3.59	2.50	2.86	2.98
GG	Mean	3.10	2.32	2.89	2.77
НН	Mean	2.22	2.57	2.33	2.37

Also the scoring for variable 29 centred on the consideration of colleagues as individuals was not highly scored across either group.

#### 4.10 b) Headteacher Assessments of IC

A comparison, Table 4.45, of the headteacher mean scores for IC compared with their rater mean scores continues to display the same pattern as seen in the other four

<u>Table 4.45 – SPSS Output - Mean Scores for IC by Individual School</u>

	Rater	Headteacher
Schools (1 - 8)	Means IC	Means IC
AA	1.22	3.67
ВВ	1.82	2.67
CC	1.08	3.67
DD	1.95	2.67
EE	2.72	3.00
FF	2.98	2.00
GG	2.77	3.67
нн	2.37	3.33

transformational leadership scales, and that is that Group 1 headteachers overrate their transformational strengths when compared to their staffs' perception. For IC, however, so too do the Group 2 headteachers. Most of the headteachers (Not FF) overestimated their individual consideration strengths when compared to the perceptions of their teaching colleagues.

A non-parametric Mann-Whitney (Table 4.46) test again shows that the rankings are higher in the Group 1 schools. As Table 4.46 (b) identifies these rankings are not significant. However, despite not making the same progress as the Group 2 headteachers, they have consistently scored themselves more highly as transformational leaders than have the Group 2 headteachers.

<u>Table 4.46 – SPSS Output - Mann-Whitney – Headteacher IC</u>

#### a) Ranks

	Rate of achievement (1 not closing on nat aver, 2 closing on nat aver)	N	Mean Rank	Sum of Ranks
19 IC	1	4	4.63	18.50
	2	4	4.38	17.50

 $Chapter \ 5: \ Leading \ the \ Teaching \ and \ Learning \ -A \ Study \ of \ transformational \ leadership \ in \ secondary \ schools \ facing \ challenging \ circumstances \ -Graham \ Wright$ 

29 IC	1	4	4.63	18.50
	2	4	4.38	17.50
31 IC -	1	4	5.00	20.00
	2	4	4.00	16.00

#### b) Test Statistics(\*)

	19 IC	29 IC	31 IC
Mann-Whitney U	7.500	7.500	6.000
Wilcoxon W	17.500	17.500	16.000
Z	158	155	667
Asymp. Sig. (2-tailed)	.874	.877	.505
Exact Sig. [2*(1-tailed Sig.)]	.886	.886	.686)

<sup>\*</sup> Grouping Variable: Rate of achievement (1 not closing on nat aver, 2 closing on nat aver)

Whilst all four headteachers in Group 2 schools scored higher than the Group 1 headteachers, they still scored relatively low (aggregated mean of 2.71) for transformational leaders compared to the statistics collected by Avolio and Bass, 2004 with a mean of 2.85 (Avolio and Bass, 2004, See Appendices C).

# 4.10 c) Individual Consideration – Summary

The slower achieving headteachers in schools facing challenging circumstances display weak IC attributes compared to other transformational behaviours and they greatly overrate the strength of their IC behaviours.

The faster achieving headteachers are not strong in their display of IC behaviours or are inconsistent in that display. Also, they are not as strong as other organisational leaders in displaying IC attributes (Avolio and Bass, 2004, Appendices C). They, too, also overrate the strength of their IC behaviours.

Individual Consideration is not as strong in challenging schools as behaviours associated with Inspirational Motivation, Idealised Influence and Intellectual Stimulation and is the weakest transformational leadership behaviours display by challenging school headteachers,

# 4.11 Gender Differences in Assessing Transformational Leadership Behaviours

Excluding the headteachers (all of whom were male), 129 respondents were identified as female and 57 were identified as male. 9 respondents did not identify themselves.

As the t-test (Table 4.47a) below illustrates, the mean scores across the collapsed variables show little difference between the gender.

Table 4.47 SPSS Output - Comparison of Means by Gender

## a) Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Err. Mean
C1 IM (Transformational)	Female staff	129	3.1085	.80758	.07110
	male staff	57	3.0702	.78881	.10448
C2 IIA (Transformational)	Female staff	129	2.7306	1.01387	.08927
	male staff	57	2.5149	.91963	.12181
C3 IIB (Transformational)	Female staff	129	2.9380	.83971	.07393
	male staff	57	2.8289	.83740	.11092
C4 IS (Transformational)	Female staff	129	2.6667	1.04924	.09238
	male staff	57	2.5526	.98735	.13078
C5 IC (Transformational)	Female staff	129	2.2946	.99041	.08720
	male staff	57	2.2105	1.03918	.13764

) Independent Samples Test			t-test for equality of means					
	Levene's Test for Equality of Variances		t-test for equality of means					
	F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	
Equal variances assumed	.432	.512	.185	183	.854	.02371	.12831	
Equal variances not assumed			.187	107.0 17	.852	.02371	.12707	
Equal variances assumed	.576	.449	1.306	183	.193	.20651	.15812	
Equal variances not assumed			1.354	113.9 69	.178	.20651	.15250	
Equal variances assumed	.207	.649	.799	183	.425	.10763	.13463	
Equal variances not assumed			.797	104.0 57	.427	.10763	.13496	
Equal variances assumed	.067	.796	.766	183	.445	.12649	.16520	
Equal variances not assumed			.783	110.2 49	.435	.12649	.16155	
Equal variances assumed	.251	.617	.553	183	.581	.08922	.16131	
Equal variances not assumed			.541	99.50 2	.590	.08922	.16496	
	Equal variances assumed Equal variances not assumed Equal variances assumed Equal variances not assumed Equal variances assumed Equal variances not assumed Equal variances not assumed Equal variances assumed Equal variances assumed Equal variances not assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances	Equal variances assumed Equal variances not assumed Equal variances assumed Equal variances assumed Equal variances not assumed Equal variances assumed Equal variances assumed Equal variances not assumed Equal variances not assumed Equal variances assumed Equal variances assumed Equal variances not assumed Equal variances	Levene's Test for Equality of Variances  F Sig.  Equal variances assumed Equal variances not assumed Equal variances not assumed Equal variances not assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances not assumed Equal variances not assumed Equal variances assumed Equal variances assumed Equal variances not assumed Equal variances not assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances Equal variances Equal variances	Levene's Test for Equality of Variances  F Sig. t  Equal variances assumed  Equal variances not assumed  Equal variances assumed  Equal variances assumed  Equal variances not assumed  Equal variances assumed  Equal variances assumed  Equal variances assumed  Equal variances not assumed  Equal variances not assumed  Equal variances not assumed  Equal variances	Levene's Test for Equal to Part of Equality of Variances	Levene's Test for Equality of Mean   Equality of Variances   Telest for Equality of Mean   Equality of Variances   Telest for Equality of Mean   Sig. (2-tailed)	Levene's Test for Equality of Variances	

Whilst it was possible to demonstrate equality of variance, the results were not statistically significant (Table 4.47b) and it was not possible to reject the null hypothesis.

The male scoring tended to be marginally lower (Table 4.47 a), the largest difference in the means is 0.2157 in the IIA perceptions of behaviours.

Overall, the differences in mean scores by gender ranged from 0.0383 - 0.2157 (Table 4.47 a), given the measurement scale on the MLQ was 0 - 4, the gender of the respondent did not appear to influence the findings and the results are not significant.

# 4.12 The Influence of School Size in Assessing Transformational Leadership Behaviours

The schools in the survey ranged in size from educating 413 pupils to educating 1182 pupils. Responses to Individual Consideration variables, for example, may be possibly stronger in the smaller school with fewer teachers than in the larger school as the headteacher to staff ratio would be much smaller, and presumably this could make individual contact that much easier. However, as the analysis below demonstrates (Table 4.48), there was no correlation between school size and transformational leadership behaviours. In addition with the IIA, IS and IC scales, the results were not significant and it was not possible to reject the null hyphothesis.

<u>Table 4.48 – SPSS Output - Covariance with School Size</u>

	C1 IM (Transform ational)	C2 IIA (Transform ational)	C3 IIB (Transform ational)	C4 IS (Transform ational)	C5 IC (Transform ational)
Pearson Correlation	193(**)	065	168(*)	084	030
Sig. (2-tailed)	.007	.364	.019	.242	.680
N	195	195	195	195	195

# 4.13 Transformational Leadership Behaviours and their influence of Performance

Part of the uniqueness of the thesis is the attempt to link leadership behaviours with student outcomes. The evidence outlined above shows that in those schools progressing at a faster rate (in terms of improvements in the percentage of 5 A\*-C GCSE grades), the transformational leadership behaviours of the headteachers have been identified by teachers as being displayed in greater intensity than by the headteachers in the slower achieving schools.

## 4.13 a) IIA and its influence on Performance

Bivariate analysis investigated the overall IIA mean alongside the means of the performance scales of effectiveness, extra effort and satisfaction (Table 4.49). C2 IIA in the table is a collapsed scale with all the scores of the related items within the scale being added up and divided by the number of items to provide an average score of the scale. With a Pearson correlation coefficient of between .568 and .711 for all three performance scales it appears that IIA may have a large effect on the movement of these scales, with deviations from the mean being followed by the other performance means in a similar way. As Table 4.49 demonstrates, there is also a high correlation between the performance scales. Therefore, there is a strong association between staff perceiving themselves to make extra effort, and consider themselves to be more effective in schools and Idealised Influence (Attributed) where these behaviours of the headteacher are seen to be strong. Work satisfaction is affected the most by changes in these IIA behaviours.

Table 4.49 – SPSS Output - IIA Covariance with Performance Scales

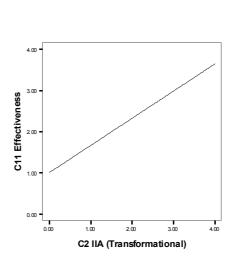
		C2 IIA (Transform ational)	C10 Extra Effort	C11 Effectiveness	C12 Satisfaction
C2 IIA (Transformational)	Pearson Correlation	1	.568	.639	.711
	Sig. (2-tailed)		.000	.000	.000
	N	195	195	195	195
C10 Extra Effort	Pearson Correlation	.568	1	.836	.751
	Sig. (2-tailed)	.000		.000	.000
	N	195	195	195	195
C11 Effectiveness	Pearson Correlation	.639	.836	1	.738
	Sig. (2-tailed)	.000	.000		.000
	N	195	195	195	195
C12 Satisfaction	Pearson Correlation	.711	.751	.738	1
	Sig. (2-tailed)	.000	.000	.000	
	N	195	195	195	195

SPSS scatterplots overlaid with regression lines also illustrate this positive relationship between IIA and the three performance scales (Graph 4 ii).

4.00 - 4.

C2 IIA (Transformational)

Graph 4 (ii) - IIA Regression Charts



3.00

4.00

2.00

C2 IIA (Transformational)

The models above, based on simple regression analysis demonstrate, for example, that a teacher will seldom make extra effort if the headteacher seldom displays behaviours associated with IIA, but will frequently make an extra effort if the headteacher frequently displays IIA behaviours. Similar patterns are modelled for the satisfaction and effectiveness scales.

Some caution needs to be applied with this data as a positive association does not necessarily indicate causation, however, IIA is perceived to have a large positive effect on performance outcomes. This is considered further below on page 133.

## 4.13 b) IIB and its influence on Performance

Analysis of the overall IIB means alongside the means of the performance scales of effectiveness, extra effort and satisfaction (Table 4.50) again showed strong correlations.

With a Pearson correlation coefficient of .636 (extra effort), .675 (effectiveness) and .684 (satisfaction) high ratings on IIB items are likely to heighten teaching staff perceptions with regard to their performance. As already seen in Table 4.49, all three performance scales correlate highly against each other. IIB, therefore, is also perceived to have a large positive effect on performance outcomes.

<u>Table 4.50 – SPSS Output - IIB Covariance with Performance Scales</u>

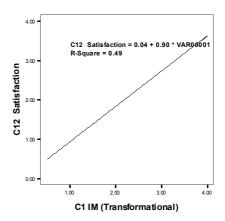
		C3 IIB (Transform ational)	C10 Extra Effort	C11 Effective ness	C12 Satisfaction
C3 IIB (Transformational)	Pearson Correlation	1	.636	.675	.684
	Sig. (2-tailed)		.000	.000	.000
	N	190	181	180	189
C10 Extra Effort	Pearson Correlation	.636	1	.842	.754
	Sig. (2-tailed)	.000		.000	.000
	N	181	183	175	182
C11 Effectiveness	Pearson Correlation	.675	.842	1	.741
	Sig. (2-tailed)	.000	.000		.000
	N	180	175	182	181
C12 Satisfaction	Pearson Correlation	.684	.754	.741	1
	Sig. (2-tailed)	.000	.000	.000	
	N	189	182	181	192

## 4.13 c) IM and its influence on Performance

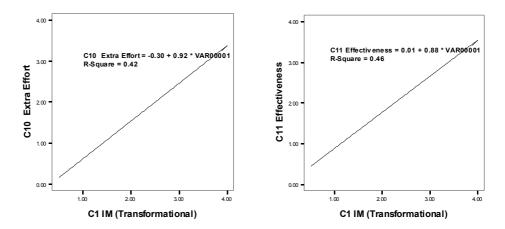
Bivariate analysis investigated the overall IM mean alongside the means of the performance scales of effectiveness, extra effort and satisfaction and similar tables to 4.49 and 4.50 were reproduced. The measurement of the covariance of the random variables produced a Pearson correlation coefficient of between .656 and .696 for all three performance scales, with IM being seen to have a large positive effect on the movement of these scales. This association, however cannot be taken as the cause of

the positive perceptions. Another variable may be having a positive effect on both IM and the performance scales, for example, changes in teaching methods resulting in better behaved and better motivated students may be a more significant factor.

The correlation merely gives a measure of the linear association between the two measures. From the data, sets of scattergraphs can be produced using SPSS that model the reported relationships (Graph 4 iii) between IM and performance. This linear model illustrates simple regression analysis between IM and the individual performance scales with the upward gradient on the models demonstrating the positive relationship.



<u>Graph 4 (iii) – IM Regression Charts</u>



4.13 d) IS and IC and their influence on Performance

Bivariate analysis investigated the overall means of IS and IC separately alongside the means of the performance scales of effectiveness, extra effort and satisfaction (Table 4.51 and Table 4.52) The correlations between the three performance scales are not shown in either table, but mirror those shown in Table 4.50.

<u>Table 4.51 – SPSS Output - IS Covariance with Performance Scales</u>

		IS	C10 Extra	C11	C12
		(Transformational)	Effort	Effectiveness	Satisfaction
IS	Pearson	1	.674	.699	.690
(Transformational)	Correlation				
	Sig. (2-	.000	.000	.000	.000
	tailed)				
	N	195	195	195	195

With a Pearson correlation coefficient of between .674 and .699 for all three performance scales and IS (Table 4.51), IS is also seen to have a position relationship on the movement of these scales within similar a range to the other transformational behaviours considered.

With IC (Table 4.52), a Pearson correlation coefficient of between .606 and .693 for all three performance scales is reported, therefore IC is also seen to have a large positive association on the movement of these scales.

Table 4.52 – SPSS Output - IC Covariance with Performance Scales

		IC(Transformational)	C10 Extra Effort	C11 Effectiveness	C12 Satisfaction
IC	Pearson	1	.606	.645	.693
(Transformational)	Correlation				
	Sig. (2-	.000	.000	.000	.000
	tailed)				
	N	195	195	195	195

#### 4.13 e) Performance Summary

Despite the relatively high correlations between the transformational leadership behaviours and the perceptions of increased performance, the findings can only highlight a positive association. Other factors, particularly those most directly related to student outcomes (eg, student attitudes, classroom teaching) may be more effective. Also the measurements used in the scales were based on attitudinal perceptions. These

may, or may not, be real in terms of the actual additional efforts put it or gains in both satisfaction and effectiveness.

Whilst the findings can highlight a positive association between the intensity of transformational leadership characteristics and student outcomes it cannot provide any linkage.

### 4.14 Transformational Leadership - Summary

In terms of staff perceptions, all five transformational leadership scales have a positive correlation with the performance scales - Extra effort, Effectiveness and Satisfaction. All five leadership scales have a positive association on the movement of the performance scales whereby an increase in response of one transformational leadership area is followed by an increase in terms of response in perceived performance (all move in the same direction, but not by the same amount).

This influence on performance has also been evidenced through the achievement of 5 A\*-C GCSE results. Group 2 (the faster achieving group) consistently produced stronger mean scores in terms of the variables related to the transformational leadership behaviours. The table below (Table 4.53 a) shows that their strongest characteristics overall were in the area of Inspirational Motivation and the least strongest characteristics were in the area of Individual Consideration. The headteachers mean scores across all five attributes were similar, ranging (Table 4.53 b) from 2.81 (IIA/IS) – 3.25 (IM).

<u>Table 4.53 – SPSS Output - Transformational Leadership Mean Scores</u>

#### a) Raters

Rate of achievement (1 not closing on nat aver, 2 closing on nat aver)	C1 IM (Transform ational)	C2 IIA (Transform ational)	C3 IIB (Transform ational)	C4 IS (Transform ational)	C5 IC (Transform ational)
1	2.7674	2.1076	2.6628	2.3140	1.7645
2	3.3853	3.0972	3.1055	2.8876	2.6835

#### b) Headteachers

Rate of					
achievement (1 not	C1 IM	C2 IIA	C3 IIB	C4 IS	C5 IC
closing on nat aver, 2	(Transform	(Transform	(Transform	(Transform	(Transform
closing on nat aver)	ational)	ational)	ational)	ational)	ational)

Chapter 5: Leading the Teaching and Learning - A Study of transformational leadership in secondary schools facing challenging circumstances - Graham Wright

1	3.2500	2.8125	3.1875	2.8125	2.9375
2	2.8750	2.8125	3.0000	2.8750	2.8750

From the above, the findings would appear to support the following statements as related to the project schools:-

All headteachers display transformational leadership qualities.

These qualities are more frequently observed in schools that are raising their standards of attainment quickly.

Headteachers in most of the schools have strengths in inspiring and motivating their staff

The ability to inspire and motivate staff is the strongest transformational leadership quality displayed by the headteachers.

Headteachers underestimate their motivational influences on staff.

Most headteachers are seen to demonstrate strong ethical and moral behaviours.

Headteachers are not seen to be consistent in the intellectual stimulation of all their teaching staff.

Individual staff consideration is perceived by teachers to be the weakest transformational leadership quality displayed by the headteachers.

Headteachers in challenging schools are perceived to have below average skills in individual staff consideration and staff intellectual stimulation when compared to leaders across 3375 other organisations (Avolio and Bass, 2004, see Appendices C).

Headteachers overestimate the degree by which they consider teachers to be individuals, with individual needs and concerns.

Headteachers in the schools where attainment has not risen in excess of national increases tend to overestimate their transformational leadership qualities.

Headteachers in the schools where attainment has not risen in excess of national increases display relatively weaker transformational leadership behaviours compared to those in faster achieving schools.

Transformational leadership behaviours have a large positive association with staff perceptions of their effectiveness, making extra effort and on the job satisfaction.

There are no gender differences when assessing headteachers.

School size does not impact upon the perceived strength of transformational qualities displayed by the headteacher.

## 4.15 Transactional Leadership Skills

The research brief also measured the management as well as the leadership qualities deemed necessary to be a successful school leader. Transactional leadership skills build on the need to get the job done and to be seen to be moving the school forward. For headteachers in challenging schools this is often a top priority. Strong transactional leaders are often pre-occupied with power and position, with politics and with perks (unlike transformational leaders who are pre-occupied with purposes, values, morals and ethics). Tangible rewards in exchange for successful performance are an indicator of a transactional leader.

The Multifactor Leadership Questionnaire is designed to test the strengths of the leader's transactional qualities in three main areas. They are:-

**Contingent Reward**\_(CR) - Measures the extent to which leaders set goals, and make rewards contingent on satisfactory performance.

**Management by Exception (Active)** (MEA)— Measures those behaviours of the headteacher that closely monitor staff performance and keep track of mistakes.

**Management by Exception (Passive)** (MEP)— Measures the degree of awareness of performance problems. A high score suggests that the headteacher is **unaware** of performance problems until they are brought to their attention and that they may not be fully engaged in the day-to-day situations. It also suggests an environment of negative feedback and punishment.

# 4.16 Contingent Reward (CR)

Contingent Reward leadership involves the headteacher agreeing with, or directing, the staff on what needs to be done, and making it clear what the rewards will be for a satisfactory outcome. The reward is taken to be a material one.

Table 4.54 - SPSS Output - Reliability Statistics for CR

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
1 CR	7.71	7.814	.523	.291	.630
11 CR	7.71	8.067	.504	.275	.642
16 CR	8.40	7.494	.477	.228	.656
35 CR	7.90	6.916	.489	.240	.654

Cronbach's alpha = .708

In considering the reliability of the CR data (Table 4.54), at .708 Cronbach's alpha was considered to represent a satisfactory measure of reliability with relatively

high/medium correlations. Reliability would not be strengthened by the removal of any item.

<u>Table 4.55 - SPSS Output – Chi-square test statistics for CR</u>

	1 CR	11 CR	16 CR	35 CR
Chi- Square(a,b,c,d)	73.365	70.457	37.105	59.568
Square(a,b,c,d) df	4	4	4	4
Asymp. Sig.	.000	.000	.000	.000

Chi-square testing was applied to all the responses to the variable statements relating to transactional leadership. In all four variable statements relating to CR, the expected frequencies and the observed frequencies showed differences large enough to reject the null hypothesis (Table 4.55). Appendix E lists the full results of the testing including the frequencies of response.

The Table 4.56 analysis of the variances highlights that there is a only a very low possibility that the results have come about by chance and the results are seen as significant.

<u>Table 4.56 - SPSS Output – One-way ANOVA – CR and Individual School Raters</u>

Sum of				
Squares	df	Mean Square	F	Sig.

 $Chapter \ 5: \ Leading \ the \ Teaching \ and \ Learning \ -A \ Study \ of \ transformational \ leadership \ in \ secondary \ schools \ facing \ challenging \ circumstances \ -Graham \ Wright$ 

1 CR	Between Groups	38.567	7	5.510	4.757	.000
	Within Groups	203.862	176	1.158		
	Total	242.429	183			
11 CR	Between Groups	28.337	7	4.048	3.755	.001
	Within Groups	181.112	168	1.078		
	Total	209.449	175			Î
16 CR	Between Groups	41.474	7	5.925	4.331	.000
	Within Groups	238.004	174	1.368		ĺ
	Total	279.478	181			Ì
35 CR	Between Groups	75.362	7	10.766	7.108	.000
	Within Groups	277.193	183	1.515		
	Total	352.555	190			

As can be seen in Table 4.57, most of the eight headteachers were rated by their staff to display some relatively strong transactional qualities (mean scores 2.5 or > show as shaded in the table) in response to statements centred around providing others with assistance in exchange for their efforts; discussing in specific terms who was responsible for achieving performance targets; making clear what to expect when performance targets were achieved and by expressing satisfaction when others met expectations.

<u>Table 4.57 – SPSS Output - Contingent Reward – Means (Raters)</u>

Schools (1 - 8)	)	1 CR	11 CR	16 CR	35 CR
AA	Mean	1.93	2.50	1.07	1.50
BB	Mean	2.42	2.41	1.50	1.53
CC	Mean	2.06	2.44	2.38	2.50
DD	Mean	3.16	2.66	2.09	2.45
EE	Mean	3.16	2.66	2.21	3.21
FF	Mean	3.38	3.09	2.67	3.55
GG	Mean	2.89	3.22	2.42	2.89
НН	Mean	2.85	3.57	2.75	2.79
Total	Mean	2.84	2.86	2.20	2.66

The strongest response was noted for variable 11, and suggested that their headteachers discussed in specific terms who is responsible for achieving performance targets.

Raters were less sure as to whether it is made clear what one can expect to receive when performance goals are achieved (variable 16).

Despite the switch of focus from transformational to transactional leadership qualities, the overall strengths in Contingent Reward appear to match closely the overall strengths of individual headteachers in transformational leadership qualities as the t-test below (Table 4.58) illustrates.

Table 4.58 - SPSS Output - Paired Samples CR and Transformational Behaviours

#### a) Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	C5 IC (Transformational)	2.2782	195	1.00282	.07181
	C6 CR (Transactional)	2.7808	195	.95704	.06854
Pair 2	C4 IS (Transformational)	2.6346	195	1.02458	.07337
	C6 CR (Transactional)	2.7808	195	.95704	.06854
Pair 3	C3 IIB (Transformational)	2.9103	195	.83010	.05944
	C6 CR (Transactional)	2.7808	195	.95704	.06854
Pair 4	C2 IIA (Transformational)	2.6608	195	.97741	.06999
	C6 CR (Transactional)	2.7808	195	.95704	.06854
Pair 5	C1 IM (Transformational)	3.1128	195	.79307	.05679
	C6 CR (Transactional)	2.7808	195	.95704	.06854

#### b) Correlations

		N	Correlation	Sig.
Pair 1	C5 IC (Transformational) & C6 CR (Transactional)	195	.683	.000
Pair 2	C4 IS (Transformational) & C6 CR (Transactional)	195	.798	.000
Pair 3	C3 IIB (Transformational) & C6 CR (Transactional)	195	.741	.000
Pair 4	C2 IIA (Transformational) & C6 CR (Transactional)	195	.716	.000
Pair 5	C1 IM (Transformational) & C6 CR (Transactional)	195	.688	.000

The CR mean score (Table 4.58 (a)) is higher than for three of the transformational leadership means. Only IM and IIB are higher. Table 4.58 (b) also reveals a high correlation between CR and all of the transformational leadership behaviours ranging from .683 - .798. These results are significant with p = <0.001 in all pairings.

# 4.16 a) Differences between Group 1 and Group 2 schools (CR)

The shading of the stronger responses by staff (Table 4.57), again illustrates a similar pattern between the two Groups of school as was seen with the transformational leadership behaviours. Although CR is a transactional leadership quality, Group 2

school (EE – HH) headteachers are perceived by their staff to display the stronger characteristics.

As can be seen from Table 4.59 (a) the Group 2 means are in excess of 3 (Range 3.08 - 3.11) compared to the Group 1 range which is lower (2.10 - 2.55). Table 4.59 (b) shows the results to be significant.

The range of means for Group 2 are in excess of the averages reported by Avolio and Bass (2004). Their statistics based on 3375 studies had an average of 2.87 for Contingent Reward. This was unexpected given the public sector nature of education with its guaranteed salaries, relative job security and non-financial targets. The Group 2 mean scores being in excess of the averages from the mainly commercial organisations published by Avolio and Bass 2004 are discussed further in Chapter 5.

<u>Table 4.59 – SPSS Output - Independent T-Test for CR – Group Statistics (Raters)</u>

a) Group Statistics

	Rate of achievement (1 not closing on nat aver, 2				Std. Error
	closing on nat aver)	N	Mean	Std. Deviation	Mean
1 CR	1	82	2.55	1.278	.141
	2	102	3.08	.982	.097
11 CR	1	76	2.53	1.137	.130
	2	100	3.11	.994	.099
16 CR	1	80	1.84	1.247	.139
	2	102	2.49	1.167	.116
35 CR	1	84	2.10	1.557	.170
	2	107	3.11	.984	.095

#### b) Independent Samples Test

		Levene's for Equal Variand	ity of	t-test for equality of means				
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference
1 CR	Equal variances assumed	13.395	.000	-3.179	182	.002	530	.167
	Equal variances not assumed			-3.090	149.171	.002	530	.171
11 CR	Equal variances assumed	3.065	.082	-3.626	174	.000	584	.161

Chapter 5: Leading the Teaching and Learning - A Study of transformational leadership in secondary schools facing challenging circumstances - Graham Wright

	Equal variances not assumed			-3.560	149.269	.000	584	.164
16 CR	Equal variances assumed	.946	.332	-3.634	180	.000	653	.180
	Equal variances not assumed			-3.604	164.169	.000	653	.181
35 CR	Equal variances assumed	37.620	.000	-5.501	189	.000	-1.017	.185
	Equal variances not assumed			-5.223	132.976	.000	-1.017	.195

The collapsed scale (Table 4.60) further demonstrates the relative strengths of the two groups of headteachers in the area of Contingent Reward. With an overall mean for the CR variables at 3.0665, the Group 2 heads were seen to display a greater intensity of CR characteristics than those associated with Intellectual Stimulation (IS) and Individual Consideration (IC) (Comparison made with statistics from Table 4.44).

<u>Table 4.60 – SPSS Output – CR Rater Means</u>

C6 CR (Transactional)

Rate of achievement (1 not closing on nat aver, 2			
closing on nat aver)	Mean	N	Std. Deviation
1	2.4186	86	.95289
2	3.0665	109	.86244
Total	2.7808	195	.95704

For Group 1 headteachers, despite their mean score being much lower, they were perceived to display stronger CR characteristics than those of IS, IC and IIA.

Headteachers, therefore, in challenging schools that are relatively strong in transformational leadership behaviours also appear to be relatively strong in the key area of Contingent Reward – a transactional leadership key area.

## 4.16 b) Headteacher Assessments of CR

The similarities between the findings of CR and the transformational leadership behaviours are also reflected in terms of the headteachers' assessments of themselves with Group 1 headteachers, in general, overrating themselves.

Analysis of the CR means using a non-parametric Mann-Whitney test (Table 4.61) further highlights the discrepancy in views between the raters and headteacher perceptions.

If there was no difference between the groups there would be a similar number of high and low ranks in each group resulting in a similar mean ranking. This is the situation with variable 1 and the headteachers' assessments of themselves. However, down the rest of the headteacher column, the Group 1 headteachers viewed themselves as stronger in the areas of CR than the Group 2 headteachers. This view was not shared by their staff as they had higher rankings for the Group 2 headteachers. The test—statistics again show that the headteacher responses are not significant, however, with no p value greater than 0.05 the results for the raters are seen as significant.

Table 4.61 Mann-Whitney Comparison of Mean Rankings - CR

#### Ranks

Kaliks					
	Rate of achievement (1		Α		В
	not closing on nat aver, 2		Headteacher		Rater
	closing on nat aver)	N	Mean Rank	N	Mean Rank
1 CR	1	4	4.50	82	80.78
	2	4	4.50	102	101.92
	Total	8		184	
11 CR	1	4	4.88	80	76.44
	2	4	4.13	102	103.31
	Total	8		182	
16 CR	1	4	5.25	84	76.66
	2	4	3.75	107	111.18
	Total	8		191	
35 CR	1	4	5.50	76	73.64
	2	4	3.50	100	99.79
	Total	8		176	

## Test Statistics for (A) Headteacher(\*)

	1 CR	11 CR	16 CR	35 CR
Mann-Whitney U	8.000	6.500	5.000	4.000
Wilcoxon W	18.000	16.500	15.000	14.000
Z	.000	500	949	-1.323
Asymp. Sig. (2-tailed)	1.000	.617	.343	.186

#### Test Statistics for (B) Raters (\*)

1 CR	16 CR	35 CR	11 CR

Chapter 5: Leading the Teaching and Learning - A Study of transformational leadership in secondary schools facing challenging circumstances - Graham Wright

Mann-Whitney U	3221.000	2875.000	2869.500	2671.000
Wilcoxon W	6624.000	6115.000	6439.500	5597.000
Z	-2.798	-3.529	-4.452	-3.522
Asymp. Sig. (2-tailed)	.005	.000	.000	.000

<sup>\*</sup> Grouping Variable: Rate of achievement (1 not closing on nat aver, 2 closing on nat aver)

### 4.16 c) Contingent Reward – Summary

The slower achieving headteachers in schools facing challenging circumstances are relatively weak in their display of CR attributes compared to the faster achieving headteachers. However, they display a greater intensity of CR characteristics than those associated with IS, IC and IIA transformational behaviours. The slower achieving headteachers also overrate the strength of their CR behaviours.

The faster achieving headteachers often display CR behaviours, and are stronger in their display of CR behaviours compared to other organisational leaders (Avolio and Bass, 2004, Appendices C).

Contingent Reward is a relatively strong behaviour displayed by headteachers in challenging schools and is displayed by all headteachers more frequently than the transformational leadership behaviours of IS and IC.

## 4.17 Management by Exception - Active (MEA)

In Active Management by Exception (MEA), the headteacher arranges to actively monitor deviances from standards, mistakes, and errors in colleagues, and takes corrective actions as necessary.

Table 4.62 - SPSS Output - Reliability Statistics for MEA

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
4 MEA	6.09	6.200	.324	.112	.409
22 MEA	6.25	6.167	.258	.068	.468
24 MEA	5.96	6.305	.261	.070	.464
27 MEA	6.56	5.878	.346	.125	.386

Cronbach's alpha = .504

A reliability test on the MEA variables was undertaken (Table 4.62) and at .504 Cronbach's alpha was considered to represent an unsatisfactory measure of reliability. It was not possible to improve on reliability by the removal of an item. This raises the possibility that the items are not an indication of the same thing, and that they may lack coherence. Kline (1999) commented that values below .7 can be expected when dealing with psychological constructs. Any MEA findings, therefore, need to be considered against this background.

Field (2004) comments that diverse themes in constructs can, in terms of the findings reliability, explain a lack of consistency of response. Variable 4 ('Focuses attention on irregularities, mistakes, exceptions, and deviations from standards') from the MEA scale may be an example of this as it could mean many things to many people.

Chi-square testing was applied to all the responses to the variable statements relating to transactional leadership. In all four variable statements relating to MEA the expected frequencies and the obtained frequencies showed differences large enough to reject the null hypothesis (Table 4.63).

<u>Table 4.63 - SPSS Output – Chi-square test statistics for MEA</u>

	4 MEA	22 MEA	24 MEA	27 MEA
Chi- Square(a,b,c,d)	35.330	15.360	42.177	37.838
df	4	4	4	4
Asymp. Sig.	.000	.004	.000	.000

The Table 4.64 analysis of the variances for MEA reports a value of p ranging across the variables from p = <0.001 - 0.010 making it possible to reject the null hypothesis.

<u>Table 4.64 - SPSS Output - One-way ANOVA - MEA and Individual School Raters</u>

		Sum of Squares	df	Mean Square	F	Sig.
4 MEA	Between Groups	24.699	7	3.528	2.758	.010
	Within Groups	227.715	178	1.279		
	Total	252.414	185			İ

Chapter 5: Leading the Teaching and Learning - A Study of transformational leadership in secondary schools facing challenging circumstances - Graham Wright

22 MEA	Between Groups	62.627	7	8.947	6.896	.000
	Within Groups	234.812	181	1.297		
	Total	297.439	188			
24 MEA	Between Groups	49.857	7	7.122	5.707	.000
	Within Groups	205.924	165	1.248		
	Total	255.780	172			
27 MEA	Between Groups	41.082	7	5.869	4.492	.000
	Within Groups	220.794	169	1.306		
	Total	261.876	176			

MEA as a transactional characteristic was seen in a much greater intensity than may have been expected. The raters' mean scores are shown in Table 4.65. Avolio and Bass (2004) report an average mean on their collation of 3375 studies of 1.67.

The total means reported in Table 4.65 are, in every case, higher than that average. Some schools, particular school AA, are much higher. All of the headteachers were seen to be actively monitoring mistakes and deviations from the normal for at least some of the time, and in school AA most of the respondents felt that it was happening on a fairly often basis. Variable 24 centred around keeping track of all mistakes was the most frequently observed characteristic.

<u>Table 4.65 – SPSS Output - Management by Exception (Active) – Means (Raters)</u>

Schools (1 - 8)		4 MEA	22 MEA	24 MEA	27 MEA	Average
AA	Mean	3.14	2.64	3.50	3.08	3.05
BB	Mean	2.61	2.33	2.18	1.39	2.12
CC	Mean	2.12	2.00	1.50	2.11	2.18
DD	Mean	2.25	2.25	2.20	1.97	2.16
EE	Mean	1.72	2.66	2.37	1.36	2.03
FF	Mean	2.14	2.33	1.94	1.61	2.01
GG	Mean	2.20	1.95	2.11	1.74	1.80
НН	Mean	2.04	.86	3.04	1.25	2.06
Total	Mean	2.19	2.12	2.36	1.72	2.18

### 4.17 a) Differences between Group 1 and Group 2 schools (MEA)

The MEA ratings did not follow the same pattern as the other transactional leadership behaviour CR. For the first time in the findings the researcher observed that Group 1 were identified as being relatively stronger within the scale (Table 4.66) with higher means across three of the four variables. Both groups had relatively high ratings for

actively seeking out and focussing upon mistakes, but in the Group 1 schools the frequency of the responses were higher.

<u>Table 4.66– SPSS Output - Descriptive Statistics – MEA (Raters)</u>

Rate of achievement (1 not closing on nat aver, 2					
closing on nat aver)		4 MEA	22 MEA	24 MEA	27 MEA
1	Mean	2.46	2.28	2.27	2.05
	N	81	82	79	79
	Std. Deviation	1.096	1.179	1.337	1.165
2	Mean	1.98	1.99	2.44	1.45
	N	105	107	94	98
	Std. Deviation	1.185	1.307	1.113	1.202
Total	Mean	2.19	2.12	2.36	1.72
	N	186	189	173	177
	Std. Deviation	1.168	1.258	1.219	1.220

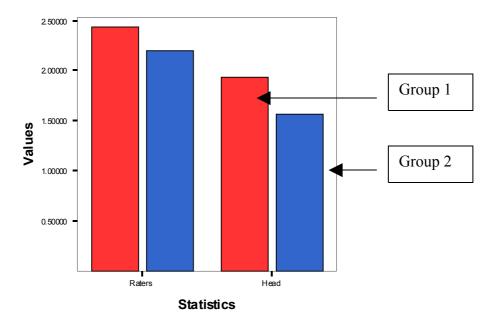
The standard deviation measurements of both groups were also larger than those previously reported. The dispersal of the values illustrates an inconsistency of response by raters with the full range of attitudinal measurements being used. This would appear to indicate a degree of selectivity on the part of the headteachers actively involved in tracking the mistakes and deviations of a proportion of their staff.

## 4.17 b) Headteacher Assessments of MEA

As can be seen from Graph 4 (iv) below, the aggregated mean scores for MEA show both groups of headteachers underestimated the strength of their MEA qualities as perceived by the staff.

Graph 4 (iv) - Comparison of Headteacher and Rater Means (MEA)





# 4.17 c) Management by Exception (Active) – Summary

The slower achieving headteachers in schools facing challenging circumstances displayed stronger MEA attributes compared to Group 2 headteachers and display relatively strong MEA attributes overall.

The faster achieving headteachers are not as strong in displaying MEA attributes compared to the transformational leadership attributes and those of CR.

All the headteachers have a measure of rating that is stronger than other organisational leaders in displaying MEA attributes (Avolio and Bass (2004) and appear to selectively or inconsistently seek out staff. All the headteachers underrate the strength of their MEA behaviours as perceived by staff.

Management by Exception (Active) whereby headteachers actively seek out and focus upon mistakes is a relatively strong feature in challenging schools, and appears to be engaged in by all the headteachers in the study.

### 4.18 Management by Exception (Passive)

Passive management by exception implies waiting passively for deviances, mistakes and errors to occur before taking corrective action.

Table 4.67 - SPSS Output - Reliability Statistics for MEP

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
3 MEP	3.32	6.250	.556	.366	.493
12 MEP	3.66	7.276	.553	.368	.514
17 MEP	2.90	8.913	.167	.030	.762
20 MEP	3.73	7.172	.527	.349	.526

Cronbach's alpha = .655

As can be seen from Table 4.67, at .655 Cronbach's alpha was considered to represent an unsatisfactory measure of reliability. Item 17 - Shows that he/she is a firm believer in "If it ain't broke, don't fix it" - has a very low correlation with the other items. To strengthen the reliability of the study, this item has been deleted.

One explanation of this low correlation may be to do with the nature of the statement. The other three variables clearly illustrate passive qualities using language such as 'fails to get involved', 'waits for things to go wrong' or 'problems must become chronic'. Variable 17 uses a positive language of being 'a firm believer in'. The scoring particularly from some of the Group 2 teaching staff (See Table 4.68, Group 2 mean of 2.01 compared to Group 1 mean of 1.05) appear to have assumed this is a positive leadership quality with the headteachers knowing where to prioritise rather than a passive quality of waiting for something to go wrong. The independent sample test demonstrates equality of variance and that the results are significant.

Table 4.68 SPSS Output - Independent T-Test – Variable 17

#### **Group Statistics**

	Rate of achievement (1 not closing on nat aver, 2 closing on nat aver)	N	Mean	Std. Deviation	Std. Error Mean
17 MEP	1	81	1.05	1.117	.124
	2	105	2.01	1.221	.119

#### **Independent Samples Test**

	Test for Equality of Variances	t-test of equality of means
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Chapter 5: Leading the Teaching and Learning - A Study of transformational leadership in secondary schools facing challenging circumstances - Graham Wright

		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference
17 MEP	Equal variances assumed	.898	.345	-5.51 7	184	.000	960	.174
	Equal variances not assumed			-5.58 1	178.66 9	.000	960	.172

Successful change agents, as these headteachers evidenced through their OFSTED reports have proved to be, are likely to be able to demonstrate a technical knowledge to staff that enable them to identify priorities and show what can be left for the present. Whilst there will be other explanations, all the headteachers have displayed strong transactional qualities and this could be a further example of knowing the actions necessary to bring about the necessary change.

As other explanations are possible, the item was deleted to return a Cronbach alpha of .762, and this was considered to represent a satisfactory measure of reliability.

Chi-square testing was applied to the remaining responses to the variable statements relating to transactional leadership. In all three variable statements relating to MEP the expected frequencies and the observed frequencies showed differences large enough to reject the null hypothesis (Table 4.69). Appendix E lists the full results of the testing including the frequencies of response.

<u>Table 4.69 - SPSS Output – Chi-square test statistics for MEP</u>

	3 MEP	12 MEP	20 MEP
Chi- Square(a,b,c,d)	77.404	152.080	183.710
df	4	4	4
Asymp. Sig.	.000	.000	.000

Given the passive nature of the leadership quality, effective leaders would be expected to score low. Avolio and Bass (2004) report an average mean of 1.03 on their collated 3375 studies. In the study, with the exception of Variable 3 'Fails to interfere until problems become serious', the results across most of the schools are lower than the Avolio and Bass (2004) average (see Table 4.70).

As Section 4.16 demonstrated, Management by Exception is a feature of all the schools, but in challenging schools, it appears to be actively engaged in and it is not a reactionary response to a situation that has been brought to the headteachers' attention.

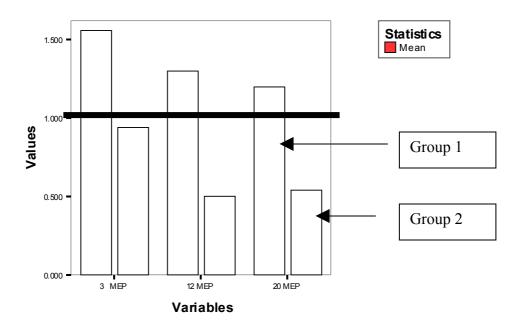
<u>Table 4.70 – SPSS Output - MEP – Means (Raters)</u>

Schools (1 - 8)		3 MEP	12 MEP	20 MEP
AA	Mean	2.64	2.47	1.93
BB	Mean	1.89	1.37	1.68
CC	Mean	2.18	1.24	1.24
DD	Mean	.61	.76	.46
EE	Mean	.82	.68	.58
FF	Mean	1.32	.50	.43
GG	Mean	1.40	.47	.75
НН	Mean	.46	.29	.41
Total	Mean	1.21	.85	.82

## 4.18 a) Differences between Group 1 and Group 2 schools (MEP)

As Table 4.70 demonstrates, there are a greater number of staff in schools, AA BB CC that believe their headteachers to be passive than in the other five schools. In Group 1, headteacher DD rates very low, implying an active engaged headteacher. School AA stands out again for its relatively high rates.

Graph 4 (v) represents the rater mean scores for the three related variable items. The black line represents the averages collated by Avolio and Bass (2004). The Group 2



Graph 4 (v) - Rater Mean Scores of Headteachers for MEP

schools returned low scores across all the variables. Teaching staff in Group 2 schools saw little evidence of their headteachers acting passively. This, in turn, further supports the possible explanation given above for the deleted variable 17.

### 4.18 b) Headteacher Assessments of MEP

As can be seen from Table 4.71, the headteachers in Group 1 with an overall mean of 1.375 had a similar view to their staff (The ranges for Graph 4 v were 1.20 to 1.56). For the Group 2 headteachers, with a mean of 1.25 they overestimated the extent by which staff consider their management style to be passive (The ranges for Graph 4 v were .50 - .94).

<u>Table 4.71 – SPSS Output - MEP – Group Means (Heads)</u>

C8 MEP (Transactional)

Rate of achievement (1 not closing on nat aver, 2 closing on nat aver)	Mean	N	Std. Deviation
1	1.3750	4	.52042
2	1.2500	4	.45644
Total	1.3125	8	.45806

4.18 c) Management by Exception (Passive) – Summary

The slower achieving headteachers in schools facing challenging circumstances are rated as having some MEP attributes and they underrate the strength of their MEP behaviours.

The faster achieving headteachers score lowly in terms of MEP behaviours. They have lower scores than other organisational leaders in displaying MEP attributes. Compared to their staff, the headteachers overrate the strength of their MEP behaviours.

### 4.19 Transactional gender and school size differences in ratings

As the t-test using the collapsed scales below demonstrates (Table 4.72), there were not any significant gender differences between the main two groups of experienced raters of the transactional scales. A small number of new female staff to the school rated the headteachers far more positively than other staff.

<u>Table 4.72 SPSS Output - Group Statistics – Gender</u>

	Raters	N	Mean	Std. Deviation	Std. Error Mean
C6 CR (Transactional)	Female teacher with over 1 year in school	121	2.7748	.95710	.08701
	Male teacher with over 1 year in school	56	2.6920	.99771	.13333
	Female teacher with less than 1 year in school	8	3.3438	.59668	.21096
C7 MEA (Transactional)	Female teacher with over 1 year in school	121	2.2438	.95222	.08657
	Male teacher with over 1 year in school	56	2.4866	.91753	.12261
	Female teacher with less than 1 year in school	8	1.5000	.75593	.26726
C8 MEP (Transactional)	Female teacher with over 1 year in school	121	1.2190	.93127	.08466
	Male teacher with over 1 year in school	56	1.5179	1.08173	.14455
	Female teacher with less than 1 year in school	8	.9063	.87564	.30958

Table 4.73 illustrates, similar to the gender comparisons, that there were also no great differences in the ratings between schools based upon pupil numbers. Table 4.73 groups

the schools into small (those with between 413 to 735 pupils) and large (those with between 872 – 1182 pupils) – all eight project schools are represented.

<u>Table 4.73 SPSS Output - Group Statistics - School Size</u>

	School size (pupil	N		G(1 D · · ·	Std. Error
	numbers)	N	Mean	Std. Deviation	Mean
C6 CR (Transactional)	Small	115	2.8652	1.01701	.09484
	Large	88	2.6761	.82452	.08789
C7 MEA (Transactional)	Small	115	2.2717	.94913	.08851
	Large	88	2.2898	.92062	.09814
C8 MEP (Transactional)	Small	115	1.1870	1.11501	.10398
	Large	88	1.3523	.72678	.07748

From a consideration of both transformational and transactional styles of leadership, it does appear that neither are influenced by school size.

### 4.20 Transactional Leadership Behaviours and their influence of Performance

From the above analysis, the schools making the fastest improvements were also seen to be strong in CR and also in MEA, but not in MEP. Again, whilst the research can show associations between the strength of the CR and MEA characteristics and student outcomes, it has not been able to identify a clear link.

#### 4.20 a) CR and its influence on Performance

Bivariate analysis investigated the overall CR mean alongside the means of the performance scales of effectiveness, extra effort and satisfaction (Table 4.74). With a Pearson correlation coefficient of between .611 and .692 for all three performance scales and CR, CR is also seen to have a large effect on the movement of these scales. These correlations being within the range as those reported for transformational leadership behaviours (.568 - .711).

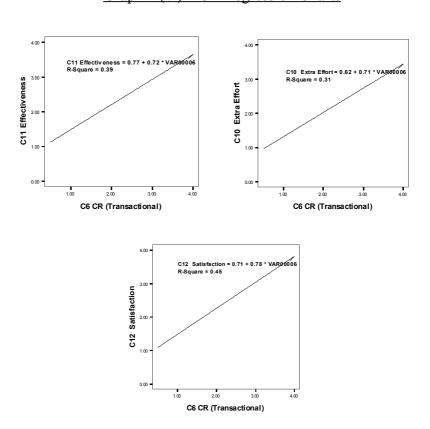
### Table 4.74 – SPSS Output - CR Covariance with Performance Scales

 $Chapter \ 5: \ Leading \ the \ Teaching \ and \ Learning \ -A \ Study \ of \ transformational \ leadership \ in \ secondary \ schools \ facing \ challenging \ circumstances \ -Graham \ Wright$ 

		C10 Extra Effort	C11 Effectiveness	C12 Satisfaction	C6 CR (Trans- actional)
C10 Extra Effort	Pearson Correlation	1	.836	.751	.611
	Sig. (2-tailed)		.000	.000	.000
	N	195	195	195	195
C11 Effectiveness	Pearson Correlation	.836	1	.738	.656
	Sig. (2-tailed)	.000		.000	.000
	N	195	195	195	195
C12 Satisfaction	Pearson Correlation	.751	.738	1	.692
	Sig. (2-tailed)	.000	.000		.000
	N	195	195	195	195
C6 CR (Transactional)	Pearson Correlation	.611	.656	.692	1
	Sig. (2-tailed)	.000	.000	.000	
	N	195	195	195	195

From the data a set of scattergraphs can be produced via SPSS that models the relationships (Graph 4 vi). These linear models illustrate simple regression analysis on the CR and the individual performance scale variables. The gradient on these models is similar to those in Graphs 4 (ii) and 4 (iii).

Graph 4 (vi) - CR Regression Charts



Therefore, from the data, positive relationships can be modelled.

### 4.20 b) MEA and its influence on Performance

Comparisons of the overall MEA mean alongside the means of the performance scales of effectiveness, extra effort and satisfaction showed a different set of results from those previously reported. (Table 4.75- the correlations between the three performance scales are not shown, but mirror those shown in Table 4.74).

Table 4.75 – SPSS Output - MEA Covariance with Performance Scales

		C7 MEA (Transactio nal)	C10 Extra Effort	C11 Effectiveness	C12 Satisfaction
C7 MEA (Transactional)	Pearson Correlation	1	.314	.316	.106
	Sig. (2-tailed)		.000	.000	.004
	N	195	195	195	195

With a Pearson correlation coefficient of .106 on perceived work satisfaction, MEA was only seen as having a small association, and a medium one on staff effectiveness and their extra effort (.316 & .314). This contrasts with all the other behaviours previously reported as they were seen to have a large effect on the performance scales.

#### 4.20 c) MEP and its influence on Performance

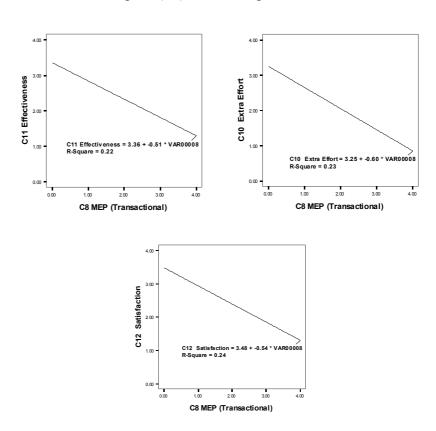
With a Pearson correlation coefficient ranging between -.309 and -.368 (Table 4.76), MEP was viewed to have a negative effect on staff effectiveness, their extra effort and their work satisfaction. Given the passive nature of the leadership quality, a negative effect on the performance scales was a possibility. The degree of correlation,

<u>Table 4.76 – SPSS Output - MEP Covariance with Performance Scales</u>

		C7 MEA	C10 Extra	C11	C12
		(Transactional)	Effort	Effectiveness	Satisfaction
	N	195	195	195	195
C8 MEP (Transactional)	Pearson Correlation	309	337	368	1
,	Sig. (2-tailed)	.000	.000	.000	
	N	195	195	195	195

however, suggests that the negative effect of MEP on the performance scales is not small. Therefore, the greater the extent by which headteachers are perceived to be

passive, the less satisfied the staff become with the less effort being put in and they feel they are less effective. SPSS interactive charts (Graph 4 vii) show the scatterplots of MEP against each of the performance scales. Linear regression demonstrates the negative nature of the relationships.



Graph 4 (vii) – MEP Regression Charts

### 4.21 Contextual Value Added

The tenuous relationship between transformational and transactional leadership behaviours and outcomes is further weakened by considering an alternative measure of outcomes.

Increasingly, the DCSF (DFES), OFSTED and the LA have come to use Contextual Value Added (CVA) measures as a means of identifying student attainment. A contextual value added score is designed to show the progress children have made during their time at the school. This is determined by comparing their achievements at age 16 with those of other pupils nationally who had the same, or similar prior

attainment, in their Standard Attainment Test results at age 11. For schools facing challenging circumstances, it can provide evidence of success not shown up by national examination results as the formula by which it is calculated allows for nine factors known to affect pupils' attainment but outside a school's control. They are gender, Special Educational Needs, ethnicity, eligibility for free school meals, first language, movement between schools, age, looked-after children, and IDACI (a postcode-based deprivation measure). What CVA attempts to do is to predict what a given child's attainment should be based on the actual attainment of other children with similar prior attainment and similar backgrounds.

If every pupil in a school achieved the median outcome for pupils with their level of prior attainment, the school would score 1000.

By using CVA as a measure of success (see Table 4.77), the relative improvement in most schools is still identified, but the degree of success changes. No longer are four schools achieving at twice the rate of the other four schools. Of importance, two of the

Table 4.77 Project Schools and CVA

	CVA	CVA
	2006	Improvement
		since 2004
AA	992.6	71
BB	1009.0	69
CC	1007.9	68
DD	975.8	37
EE	967.8	-22
FF	987.4	-12
GG	1020.9	88
HH	1000.6	48

faster achieving schools as identified by GCSE results actually appear in decline. CVA is still an evolving instrument, but as it stands it does demonstrate that four of the project schools achieve above average results (CVA>1000) although they would be well below the average in terms of overall GCSE 5A\* - C performance.

If we accept CVA as an alternative valid measure of school improvement, the results for EE and FF, both with headteachers seen to be relatively strong in the transformational

behaviours and Contingent Reward behaviours, would suggest that leadership behaviours have a minimal effect on standards of attainment or need to be considered alongside other potentially effective factors. Also, these other factors may be more influential. This would support Hopkins (2007) who comments that good quality teaching and learning; a balanced and interesting curriculum; good student behaviour and attitudes; good partnership arrangements; a good, well resourced, environment and a professional learning community are as important as good leadership and it is these factors that are more likely to create the conditions whereby standards of attainment will rise.

### 4.22 Transactional Leadership - Summary

From the above, the findings would appear to support the following statements as related to the project schools:-

Contingent Reward is a relatively strong characteristic of all headteachers.

Contingent Reward is stronger in those schools whereby the headteachers are perceived to be relatively strong in transformational leadership behaviours.

Contingent Reward can have a large effect on staff satisfaction, extra-effort and effectiveness.

Headteachers in the faster achieving schools are more likely to be recognised as ones who reward satisfactory performance.

Most headteachers in challenging schools are perceived as actively monitoring mistakes and deviations from the standard.

There is no association between the strength of leadership characteristics linked with actively monitoring mistakes and faster achieving schools.

Headteachers in challenging schools are assessed to have relatively stronger behaviours in actively managing by exception than other leaders.

Headteachers in the slower achieving schools sometimes fail to interfere until there is a problem. This seldom happens in the faster achieving schools.

Size of school appears to have little influence on the headteachers frequency to display transactional leadership skills.

## 4.23 Laissez-faire Leadership (LF)

Laissez-faire leadership is the avoidance of leadership or absence of leadership. In all of the project schools recent OFSTED reports commented that the quality of leadership was at least satisfactory. For teachers to agree with the OFSTED report the ratings would be expected to be low.

The reliability test on LF produced alpha at .217. At .217 Cronbach's alpha was considered to represent a poor measure of reliability.

<u>Table 4.78 - SPSS Output - Reliability Statistics for LF</u>

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
5 LF	4.09	2.992	.352	.263	233(a)
7 LF	4.03	3.537	.310	.202	099(a)
28 LF	2.52	6.306	327	.109	.624
33 LF	3.82	3.270	.233	.189	035(a)

The negative values (a) in Table 4.78 indicate a negative average covariance among items. For the items within the scale, when one variable deviates from its mean, the expectation is that the other variable will deviate from their mean in a similar way. Item 28 – Avoids making decisions – appears to have moved in the opposite direction.

The deletion of item 28 greatly increases the scale's reliability, but with Cronbach's alpha at .624 it would be unsafe to draw too many conclusions from this data. This

<u>Table 4.79 Correlations between the Laissez-faire Variables</u>

	5 LF	7 LF	33 LF
Chi- Square(a,b,c)	222.482	159.816	112.112
df	4	4	4
Asymp. Sig.	.000	.000	.000

variable is discussed below, and again in Chapter five, although for analysis purposes it has been removed. Table 4.79, chi-square analysis of the related variables, shows no significance above the 0.05 level making it possible to reject the null hypothesis.

### 4.23 a) Differences between Group 1 and Group 2 schools (LF)

The mean scores for the LF variables are displayed in Table 4.80. The Avolio and Bass, 2004, normative statistics (See Appendices C) have a mean of 0.65. Against this benchmark, the means are high - in particular school AA at 1.88.

School AA respondents have been particularly critical of the headteacher throughout the questionnaire despite the OFSTED comment of the headteacher as being 'the key driving force in moving the school forward' and as having 'displayed very good leadership qualities'. Schools BB and CC are also much higher than expectation.

Schools **O5 O**7 O33 AA Mean 2.13 1.80 1.47 BB Mean 1.05 .89 1.30 CC Mean 1.06 1.22 1.00 DD Mean .46 .29 1.29 EE Mean .33 .74 1.03 FF Mean .78 1.22 .61 GG Mean .79 .60 .65 HHMean .62 .32 .52 Total Mean .79 .75 .98

Table 4.80 - Laissez-faire Means

### 4.23 b) Headteacher Assessments of LF

No headteacher scored themselves higher than a 1 on these variables, so that the range for all the headteachers was between 0.25 - 1.00. Only the headteacher of school AA was greatly different in his assessment compared to his staff. Again, they gave him stronger characteristics than he associated with himself.

Although Variable 28 was deleted from the analysis, it does require separate consideration. The variable statement was 'Avoids making decisions'. The assumption would be, if the pattern of the other LF responses was followed, that the scores would be low.

Table 4.81 – Variable 28 - Report

a) Raters

Schools (1 - 8)	Mean	N	Std. Deviation
AA	2.07	14	1.072
BB	2.00	17	.935

Chapter 5: Leading the Teaching and Learning - A Study of transformational leadership in secondary schools facing challenging circumstances - Graham Wright

CC	2.56	18	.922
DD	1.91	33	.914
EE	2.03	33	1.104
FF	2.70	20	.801
GG	2.21	19	1.316
НН	2.93	27	.781
Total	2.29	181	1.036

b) Heads

			Std.
Schools (1 - 8)	Mean	Ν	Deviation
AA	3.00	1	
ВВ	3.00	1	•
cc	3.00	1	•
DD	2.00	1	•
EE	2.00	1	-
FF	1.00	1	
GG	3.00	1	•
НН	3.00	1	
Total	2.50	8	.756

The raters' responses across all schools were that all heads do sometimes avoid making decisions (See Table 4.81 (a)). The mean total for this variable is 2.29 compared to between .079 - 0.98 across the other three related variables.

The variable stands out further as an anomaly when the mean total of the headteachers' responses is considered at 2.5. From Table 4.81(b) one headteacher seldom avoids making decisions, two sometimes avoid making decisions, but five headteachers state that they fairly often avoid making decisions. This anomaly is considered further in chapter 5 as many of the headteachers and some of the teacher raters may have interpreted this as a positive decision sharing statement rather than an inactive laissezfaire statement.

#### 4.23 c) LF and its influence on Performance

Bivariate analysis was again used to investigate the overall LF mean alongside the means of the performance scales of effectiveness, extra effort and satisfaction. The correlations were marginally negative, but as Table 4.82 illustrates, it was not possible to reject the null hypothesis.

Table 4.82 – SPSS Output - LF Covariance with Performance Scales

C10 Extra	C11	C12	C9 Laissez -
Effort	Effectiveness	Satisfaction	Faire

Chapter 5: Leading the Teaching and Learning - A Study of transformational leadership in secondary schools facing challenging circumstances - Graham Wright

C10 Extra Effort	Pearson Correlation	1	.836	.751	110
	Sig. (2-tailed)		.000	.000	.127
	N	195	195	195	195
C11 Effectiveness	Pearson Correlation	.836	1	.738	019
	Sig. (2-tailed)	.000		.000	.796
	N	195	195	195	195
C12 Satisfaction	Pearson Correlation	.751	.738	1	156
	Sig. (2-tailed)	.000	.000		.029
	N	195	195	195	195
C9 Laissez - Faire	Pearson Correlation	110	019	156	1
	Sig. (2-tailed)	.127	.796	.029	
	N	195	195	195	195

# **4.24 Summary of the Findings**

One of the strengths of the MLQ is that it attempts to link leadership qualities to outcomes. Followers assess their leaders across a range of statements designed to measure how effective they feel that their leader is. They also attempt to measure the degree of satisfaction they receive through working with that leader, and attempt to assess the extent that they are prepared to put in extra effort. The assessments made are attitudinal and based upon the respondents own perceptions. These assessments may reflect recent objective hard data centred upon student attainment, but most are likely to be subjective (particularly those related to satisfaction). This thesis moves beyond the largely subjective in attempting to link leadership qualities to actual hard data – student success at GCSE.

The findings have demonstrated 'good' correlations (>.6) and, therefore 'good' associations between the performance scales and all the transformational leadership scales along with the transactional scale of Contingent Reward. In each case, Group 2 (the faster achieving schools in terms of 5 GCSEs A\*-Cs) were shown to have higher mean scores, and, therefore, perceived to be stronger in these areas than the Group 1 schools.

The research has also demonstrated that Management by Exception (Active) can have a medium effect (>3, <5) on the performance scales and that Management by Exception (Passive) can have a negative medium effect (>-3, <-5) on the performance scales.

Sections 4.14 and 4.22 sum up the main findings on the application of transformational and transactional leadership behaviours in schools facing challenging circumstances.

Overall, with regard to the leadership qualities of headteachers in schools facing challenging circumstances, the main findings from the research would appear to suggest that all headteachers in the research project displayed both a range of transformational and transactional leadership qualities. They had relative strengths in transformational leadership characteristics associated with inspiring and motivating individuals. This ability to motivate was their strongest leadership quality and was strong in all schools. Other findings suggested that headteachers in challenging schools are assessed to have relatively stronger behaviours in actively managing by exception.

As a group, headteachers appear to underestimate their motivational influences on teaching staff, and are not perceived to be consistent in the intellectual stimulation of teachers. Also, for the headteachers in this study, individual staff consideration was perceived by teachers to be the least developed transformational leadership quality that the headteachers displayed although they overestimated the degree by which they considered teachers to be individuals, with individual needs and concerns.

In schools that are raising standards faster, headteachers had relative strengths in transformational leadership characteristics associated with demonstrating strong ethical and moral behaviours. These heads also had strengths in transactional leadership behaviours around rewarding teaching staff for satisfactory performance. They also had an awareness of the strengths that were closer to that of their staffs' assessment.

In the schools where attainment has not risen in advance of national improvements, headteachers tended to overestimate their transformational leadership qualities as well as aspects of their transactional leadership qualities. Also, in the slower achieving schools, headteachers were perceived to be not as strong in displaying transformational leadership behaviours compared to the faster achieving schools. There was also the suggestion that some headteachers in the slower achieving schools sometimes fail to interfere until there is a problem.

The next chapter discusses how these findings impact upon existing knowledge. It also reviews the deficiencies discovered in the research design and considers if any different approaches may have been more appropriate. Central to the discussion is the insight provided towards addressing the key research questions.

Leading the Teaching and Learning

- A study of transformational leadership in secondary schools facing challenging

circumstances.

#### **CHAPTER 5 – DISCUSSION**

#### 5.1 Introduction

The thesis adopts the hypothesis that headteachers with strong transformational leadership behaviours are more effective in raising standards of student attainment within a challenging school context than headteachers with other types of leadership behaviour.

Strong transformational leadership behaviours were found in many of the project schools along with strong leadership behaviours associated with transactional attributes. There was also a suggestion of instructional leadership although this was not measured. The schools displaying strong leadership appeared to be the ones whereby student attainment had risen more quickly.

This chapter considers the findings under the headings of the key research brief questions. The findings are considered alongside other educational studies into transformational leadership. The key questions were:-

What are the effective leadership skills and qualities of the headteachers in the study?

Can any assessment of their influence, relative to student attainment be considered?

Do their skills match those of a transformational leader?

Can a set of leadership behaviours be identified as a model for similar schools in challenging circumstances?

5.2 What are the effective leadership skills and qualities of headteachers in schools facing challenging circumstances?

### 5.2 a) Length of Headteacher Service

The school OFSTED reports judged all of the headteachers to be at least satisfactory in terms of their leadership skills. All of them had been in post for at least three years and they had all experienced year-on-year school improvements since 2004 (in terms of an increase in 5 A\*-C GCSE results). All eight of the thesis project schools headteachers had displayed both transformational and transactional leadership behaviours as categorised by Bass and Avolio (1994) during their time in post. Whilst the thesis did not investigate outcomes against length of headteacher service, there was in every case, stability of leadership.

Macbeath (2006) commented that the stability taken for granted in more 'affluent' schools is lacking in schools facing challenging circumstances. They concluded that their project into schools facing exceptionally challenging circumstances demonstrated that

'a prerequisite of innovation is a stability threshold which has to be in place before more imaginative or challenging solutions can be implemented....Change takes time. But change takes longer where there is a legacy of diminished social capital.' (Macbeath 2006 p.135)

West, Ainscow & Stanford (2005) investigating thirty-four schools facing challenging circumstances that had make steady year-on-year improvements noted that the average length of appointment for the headteacher had been seven years.

Stability of leadership, and the stable school environment it creates, therefore, is seen as an important factor if the improvements made are to be sustained.

#### 5.2 b) Effective Leadership Skills

The findings from Chapter 4 illustrate relative strengths in all the transformational leadership behaviours measured and in two of the three transactional behaviours. Across the project schools, Inspirational Motivation, Idealised Influence (both Attributed and Behaviour) and Contingent Reward appeared to be displayed in greater intensity than other leadership components including Individual Consideration and Intellectual Stimulation. Also the transactional leadership component of Management by Exception (Active) was reported in greater intensity than in other studies both educational (Eden 1998; Leithwood and Jantzi 1999; Barnett and McCormack 2003; West, Ainscow & Stanford, 2005) and non-educational (Avolio and Bass 2004).

#### 5.2 c) Effective Leadership Skills - Inspirational Motivation

The greatest reported strength was the ability of headteachers to inspire and motivate their staff to work towards the vision. As Harris and Chapman's (2002) research demonstrated, the effective leader of a school facing challenging circumstances is not only one that is pragmatic and resilient, but is also one that is able to convince others that their vision is worth sharing and pursuing (p6). Bivariate analysis of Inspirational Motivation and the outcome scales of Effectiveness, Satisfaction and Extra-Effort (Graph 4 iii – p. 134) demonstrated relatively strong correlations with a positive association between them. Inspired and motivated staff perceive that they are more likely to make an extra effort, gain job satisfaction and be more effective if inspired and motivated by their headteachers.

This perception does not necessary translate into the school actually being more effective in terms of raising standards of attainment. Column two of table 5.1 lists the percentage improvement in terms of 5 A\*-C GCSE over the last three years (from July 2003 – July 2006) of the eight schools. Column three gives the Inspirational Motivation mean scores (i.e. the sum of the variables 9, 13, 26 and 36 for each school divided by four) reported by their individual school respondents.

<u>Table 5.1 – Comparison of GCSE Results against IM</u>

GCSE 5A*-C %	Inspirational

Chapter 5: Leading the Teaching and Learning - A Study of transformational leadership in secondary schools facing challenging circumstances - Graham Wright

	Improvement (2003 – 06)	Motivation (Mean)
DD	-10 *	3.20
BB	+1	2.66
CC	+4	2.44
AA	+6	2.45
EE	+12	3.39
GG	+12	3.72
HH	+13	2.90
FF	+14	3.59
National Rate of Improvement (2003 – 06)	+5	

<sup>\*</sup> Improvement of +4 since July 2004

From table 5.1 several anomalies were identified. The headteacher of school DD scores relatively highly in terms of offering inspirational motivation, yet during the time of his headship the results have collapsed, although in the past two years they have recovered slightly from their 2004 low. School AA displays a relatively low mean score compared to the other project schools, yet AA's results have improved slightly ahead of the national rate of improvement. School HH has experienced a significant improvement in the results yet the teaching staff respondents do not rate the headteacher as highly as the headteacher in school DD who experienced a -10% fall in their overall 5 A\*-C grades during this time period.

Most models of transformational leadership (Bass and Avolio, 1997; Leithwood, Jantzi and Steinbach, 1999) assume that it is the leader who articulates a vision that motivates and inspires followers to sacrifice their own interests for the sake of the organisation. Vision is no doubt an important part of leadership, but evidence from the Barnett and McCormick (2003) study suggests that it must reflect the needs, interests, values and beliefs of the school community (Sergiovanni, 1990). Those community needs and interests are likely to extend beyond the need to raise examination results and may, in part, explain the responses from school DD.

Further, as Pawar and Eastman (1997) report, the inspirational strength of a vision appears to depend partly on the degree to which it reflects the interests and characteristics of not just the organisation, but also its employees.

School AA's OFSTED report (2007) reflected upon the headteacher as being the key driving force in moving the school forward through the display of some very good leadership qualities. Within it, it reports a significant restructuring programme –

'This forms part of a wider school leadership and management structure which will be finalised during the next three years. The headteacher and governors have already made some difficult staffing decisions which include the restructuring of job roles and the elimination of weaker teaching.' (p. 1).

A vision that actively seeks to challenge and remove some followers will not have whole school teacher support. This may explain why the OFSTED team appears to rate the headteacher's leadership qualities far more positively than the relatively small number of teaching staff (fifteen) who responded to the questionnaire.

All the headteachers, therefore, had relative strengths in motivating their teaching staff, and this was (in seven out of eight schools) their strongest behavioural characteristic of those measured. The research, demonstrated that these behaviours were, overall, stronger in the faster achieving schools. Despite the teaching staff who responded in these schools perceiving themselves to be more effective, the research evidence between student outcomes and Individual Motivation was not able to substantiate or reject this perception.

### 5.2 d) Effective Leadership Skills - Idealised Influence

Idealised Influence centres upon the qualities of the headteacher that enable them to be observed serving as role models, displaying behaviours that can be admired, respected and trusted by most teachers. Idealised Influence (Attributed) reviews the charisma attributed to the leader. It is also an indicator that the headteacher is prepared to take risks and is consistent in their actions. Idealised Influence (Behaviour) is a display of qualities emphasising a collective sense of mission and values. Both scales are a measure of the staff confidence in the headteacher focusing upon higher-order ideals and values for the common good.

Considering the moral and ethical consequences of decisions and emphasising the importance of having a collective sense of mission were two strong statements associated with the project headteachers.

Again analysis of the Idealised Influence variables and the outcome scales of Effectiveness, Satisfaction and Extra-Effort (tables 4.13 and 4.21) demonstrate relatively strong correlations with a positive association between them.

There was a large difference between the Group 1 schools who were improving at the same rate as all schools nationally, but had yet to break through the DFES 30% 2006 floor target, and the Group 2 schools that were exceeding the national rates of improvement and had already moved above the floor target and away from any negative consequences associated with not achieving it. Group 2 teacher respondents were more positive.

Tables 4.14 and 4.22 (Summarised in table 5.2) clearly illustrated this difference with no strong affiliations of wishing to be associated with the headteacher if the school was still below the floor target.

<u>Table 5.2 – Mean Ranges – Idealised Influence</u>

Behaviour	Group	Mean Range
II Attributed	1	1.75 - 2.45
	2	2.84 - 3.10
II Behaviour	1	2.32 - 2.74
	2	2.60 - 3.36

This could be because of the external perception that the schools may be potentially underachieving. West, Ainscow & Stanford (2005) comment that school success may need to precede a 'feel good' factor, and therefore, for some staff it may be first necessary before they admit an association with the headteacher as leader of the organisation.

'It seems that with success in motion, a 'feel-good' factor becomes present that strengthens staff and pupil confidence to achieve more. Expectations are raised, and this seems to underpin improvements.' (West, Ainscow & Stanford, 2005, p87)

Although there were strong positive correlations (Tables 4.49 and 4.50) between Idealised Influence and the outcome scales, there was also an indication that not everyone puts in the extra effort that may be necessary to start to achieve a 'feel-good' factor. For example, (variable 10) 25.8% of the respondents seldom or never felt any pride from being associated with the headteacher (Frequency Charts, Appendices E).

Barnett, McCormick & Conners (2000) commented upon the notion of the follower to 'consent to leadership'. They felt that this notion was particularly important in schools that have properties of looseness in their structural couplings. Greenfield (1991) states that in reality, if the teachers are going to be influenced by leadership of a principal it is by choice they consent to the leadership and that they are willing to be led. The quantitative nature of the research design, suggests an unwillingness to be led (by those responding to the MLQ) in some cases, particularly in school AA and possibly in schools BB and CC, but it does not allow for an explanation. Neither does the research design provide an insight into charisma. There is no way of gauging whether, for example, the Group 2 headteachers are more charismatic than most of the others. Although the data reveals a significant difference between schools AA BB CC and the rest, it cannot explain it, thereby creating additional areas of research that need consideration. Whilst the researcher can demonstrate that Idealised Influence is seen as an important quality of headteachers of challenging schools, and that most headteachers are seen to demonstrate strong ethical and moral behaviours, it cannot detail the nature and blend of the Idealised Influence necessary for a school to be effective in terms of raising standards of attainment.

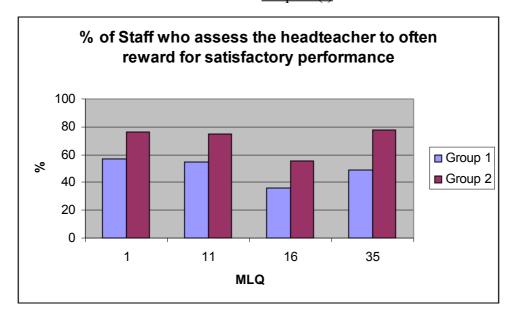
### 5.2 e) Effective Leadership Skills - Contingent Reward

Responses to variables concerning Contingent Reward show that it was also a relatively strong characteristic of most of the headteachers and all the headteachers considered themselves strong in this area. Contingent Reward leadership behaviour involves the headteacher assigning work to the teacher, getting agreement on what needs to be done and then promising rewards for when the work is carried out satisfactorily. This

transactional leadership behaviour was seen to be a stronger characteristic of the challenging school headteachers than the transformational characteristics of Idealised Influence (Attributed), Intellectual Stimulation and Individual Consideration.

Again, bivariate analysis of Contingent Reward and the outcome scales of Effectiveness, Satisfaction and Extra-Effort (Table 4.74) demonstrated relatively strong correlations with a positive association between them. Graph 5 (i) (data from table 4.59) clearly illustrates the strength of those responses from within both groups of schools.

The majority of the teachers in all schools assessed the headteachers to, at least, often provide them with assistance in exchange for their efforts and to discuss in specific terms who is responsible for achieving performance targets. From within Group 2, all the headteachers were scored relatively highly across all four variables. They scored particularly highly (in terms of the Group 1 headteachers) in making clear what could be expected in return for achieving performance rewards and in expressing satisfaction when expectations are met by teachers.



Graph 5.(i)

Contingent Reward is a transactional leadership quality when the reward is tangible, for example, a bonus payment. However, this type of reward is rare in education. Far more common is both formal and informal feedback with the former being an increasingly

important part of teacher performance management cycle. Antonakis, Avolio, & Sivasubramaniam, (2003) consider that Contingent Reward can be transformational if the reward is psychological, such as praise. This possible interpretation of the model may explain the relatively high scores returned. Alternatively, since 2003 changes to teachers pay and conditions have resulted in additional payments to teachers being possible, excellent/advanced skills teacher incentives being introduced, blocks by headteachers on teacher movement up the pay spine being possible, and an easing of the barriers by which it is possible to remove inadequate teachers. For headteachers in challenging schools needing to move quickly these changes have provided additional flexible tools.

Bass and Riggio (2006) consider that Contingent Reward

'has been found to be reasonably effective in motivating others to achieve higher levels of development and performance, although not as much as any of the transformational components'. (Bass and Riggio, 2006, p. 8)

In challenging schools, Contingent Reward, appears to have a stronger connection with higher levels of development and performance than that reported by Bass and Riggio (2006). It was seen to be relatively stronger in the Group 2 headteachers and overall, displayed more frequently than several transformational behaviours.

MacBeath et al (2006) in their recommendations to responding to challenging circumstances, highlighted that in times of teacher shortage it has been difficult to recruit and retain high quality staff, and that there is a need for incentives.

'While of potential benefit generally such measures will pay off most in disadvantaged schools'. (MacBeath, 2006, p. 135)

This thesis lends support to their findings. Although the display of these characteristics may impact directly on creating school stability and raising the quality of teaching, the research evidence cannot demonstrate their effectiveness in terms of impacting upon student attainment outcomes other than to comment that the teachers responding did perceive them to make a positive difference. It does, however, illustrate the relatively

strong presence of this transactional characteristic, particularly in the faster achieving schools facing challenging circumstances.

### 5.2 f) Effective Leadership Skills - Management by Exception (Active)

All the headteachers were seen to employ active management by exception. This is a corrective quality whereby the headteacher arranges to actively monitor deviances from standards, mistakes and errors. The headteacher then take the necessary action to correct the situation. For headteacher AA this was seen to be their strongest leadership quality compared to their other characteristics. However, all the headteachers scored higher than expected when compared to the Avolio and Bass, 2004, normative statistics (See Appendices C), based on the assessment of 3375 organisational leaders. Avolio and Bass, 2004 (See Appendices C), have a mean at 1.67. As can be seen from the summary of table 4.56 (see table 5.3 below), in the thesis study, the individual school scores were well above the Avolio and Bass (2004) mean with scores ranging from 2.05 – 2.46 for Group 1 schools and 1.45 – 2.44 for Group 2 schools. Active headteacher behaviour in monitoring and managing deviations was a feature of all the schools.

<u>Table 5.3 – Summary of Descriptive Statistics – MEA (Raters)</u>

Rate of achievement (1 not closing on nat aver, 2 closing on nat aver)		4 MEA	22 MEA	24 MEA	27 MEA
1	Mean	2.46	2.28	2.27	2.05
2	Mean	1.98	1.99	2.44	1.45
Total	Mean	2.19	2.12	2.36	1.72

As stated, performance management in schools has become increasingly focused upon hard data centred upon raising standards of attainment and upon demonstrating satisfactory progress against value added charts. This may, in part, account for higher than expected scores. Effective headteachers in challenging schools monitor and evaluate pupils' achievement (Englefield, 2001; Carter 1999). Englefield (2001) notes that all fourteen headteachers in his qualitative study of effective schools in challenging circumstances had put detailed systems in place to monitor the achievement of pupils as they worked towards individual targets. The collation of attainment data, and cross-referencing it with other school systems, was deemed to be a priority. Carter (1999) saw the testing of student achievement as serving several functions, one of which was that it enabled teaching staff to be monitored.

With the increased focus on hard data, Hallinger (2005) considers that instructional leadership has been encouraged to re-emerge. One dimension of instructional leadership is to manage the instructional programme. This requires supervising and evaluating instruction, co-ordinating the curriculum and monitoring progress. This supervision and monitoring of teaching and learning, with its emphasis on attention placed on mistakes and deviations from standards, is reported by the relatively high levels of MBE-A. For this level of supervision to be moving a school forward implies a good knowledge on the part of the leader as to what is required.

Another reason that may, in part, account for the intensity of responses to MBE-A centres upon the nature of the school. Schools facing challenging circumstances are frequently 'causes for concern' for Local Authorities (LA) and nearly  $1/3^{rd}$  of all the schools are in a special OFSTED category. There is an expectation that the LA will actively monitor, challenge and support all schools that have relatively low outcomes in terms of attainment as do most schools facing challenging circumstances. There is a need and a pressure for a rapid improvement. Ansell (2004) in his report to the National College of School Leadership suggests that the quickest way to improve schools facing challenging circumstances is to

'select an experienced headteacher with a demonstrated capacity to improve a school facing challenging circumstances' (Ansell, 2004, p. 2).

With an experienced headteacher often comes the technical knowledge to initiate and bring about change. West, Ainscow & Stanford (2005) comment that:-

'when the full list of problems has been drawn up, and staff members are able to enumerate the many barriers to progress, simply contemplating these can paralyse even the most enthusiastic of teachers'. (p. 85)

To overcome those barriers and for staff to be developed, Hopkins (2001) considers that the headteacher needs knowledge on the 'technical core' of the school.

The relatively high levels of active management by exception reported by the respondents supports the argument that the headteachers use their 'technical core' knowledge to bring about the required changes needed at this stage of their development. For example, 55.5% of teacher respondents commented that their headteachers, fairly often to always, kept track of all mistakes (Variable 24 – see Frequency Tables – Appendices E) directing attention back towards a set standard.

Again, the application of the headteachers' technical knowledge in removing/reducing the barriers to progress is an area worthy of further research, and there may be other explanations as to why there are relatively high scores in terms of active management by exception, but there does appear to be elements of instructional leadership present. Whilst teacher perceptions are that such elements may have a moderate effect (Table 4.57) on the schools' effectiveness, this link was not established.

### 5.2 g) Effective Leadership Skills -Summary

Analysis of the teacher responses indicate that the effective leadership skills and qualities of headteachers in schools facing challenging circumstances are those that demonstrate transformational leadership skills as well as those transactional leadership qualities associated with contingent reward and active management by exception (the responses from the headteachers showed similar results). The respondents perceived there to be a high level of positive correlations between these qualities and their extraeffort, effectiveness and satisfaction.

When the teacher responses were analysed against student outcomes (measured in terms of improvements in the percentage of 5 A\*-C GCSEs), some transformational behaviours appeared to have a greater influence than others, and some transactional behaviours appeared to relatively strong. All the schools in the survey were seen to be relatively effective as all had had, at least, a satisfactory endorsement of both their school and current headteacher by an OFSTED inspection.

All the schools had the same starting base, but were split into two groups (one having moved in line with national improvements, yet still officially designated as facing challenging circumstances, and the second group moving at least twice as fast as the

national improvements and no longer officially designated as facing challenging circumstances). Although present in all schools, the Group 2 schools displayed greater strengths to

inspire and motivate,

emphasise, and engage in, a collective sense of mission and values based upon actions, using power only when necessary and never for personal gain, agree and assign tasks to staff and to appropriately reward them for the satisfactory completing them,

take the right course of action and be able to engender trust and respect from colleagues,

to monitor and supervise teaching and learning activity,

be consistent in their actions.

Underpinning these strengths was a stability of leadership, appearing confident and knowledgeable as to what was required to move the school forward.

The transformational leadership attributes of Individual Consideration and Intellectual Stimulation did not score as strongly as in other studies (Barnett, McCormick and Conners, 2000; Day, Harris and Hadfield, 2000; Barker, 2005). These studies, however, were qualitative and focused upon headteacher responses. The headteachers in the thesis study did consider themselves to be relatively strong in these areas and they did acknowledge the importance of the link between staff development and their role as headteachers to maximising the staffs' potential. The teacher respondents did not support the headteachers' assessment in terms of their assessment scores and this is discussed in more detail in section 5.4 below.

Similar to Eden's (1998) study, transformational leadership is relatively successful when transactional practices are also incorporated in such a way that they remained sensitive to the teachers who accepted them. Both leadership styles are interwoven and are seen as vital for the resolution of the paradox (set routines and bureaucracy v developing new relationships and setting new goals) that school leaders face in terms of overcoming

barriers to learning, creating school stability and thereby achieving improvements in student attainment.

### 5.3 Can any assessment of their influence, relative to student attainment be considered?

### 5. 3 a) Grouping the Schools

The eight schools participating in the research were grouped into two distinct types. All the schools had been judged to be at least satisfactory at the time of their last OFSTED report and this had included a positive judgement on the current headteacher. The senior leadership was stable with all of the headteachers having had at least three years service in the school at this level. Seven of the eight schools had seen a year-on-year improvement in percentage of 5A\*- C GCSE grades since July 2003 through until July 2006. One set of school results had collapsed in July 2004 to 21% from 35% (2003), but had risen back up to 26% by 2006.

Four of the schools (AA BB CC DD) had increased their percentage of 5 A\*-C grades during this time (DD from 2004), but none had broken through the 30% floor target set by the DFES for 2006. These schools were placed in Group 1. By 2006, all schools facing challenging circumstances were expected to have achieved this 30% target.

In contrast, the four schools that constituted Group 2 (EE FF GG HH) had all significantly increased their 5 A\*-C grades by at least 12% over the previous three years, against an overall national improvement of 5%. In so doing, they had all, at some point over the previous three years, climbed above the DFES 2006 floor target and remained above it.

5 GCSE grades of A\*-C was taken as the benchmark as this was viewed as a popular statistic used by the media and parents, and to some extent by the LA and the DCSF (DFES) for assessing 'good' from 'poor' school performance. Despite its popularity, it is a crude measure focused upon a minority of pupils and their achievement. Other methods of measuring student attainment (SAT results, various value added tools, eg

MiDyis, FFT or CVA) may have grouped the schools differently as was demonstrated in chapter 4, section 21, whereby CVA was used and the outcomes appeared different.

### 5.3 b) Group 1 v Group 2

Despite the crude split of the groupings there were some noticeable differences between them. As can be seen from section 5.2 (g), those leadership behaviours deemed to have the greatest influence in bringing about school improvement were reported in greater intensities in the Group 2 schools.

In table 5.4 below, the extent of the differences are outlined. It can be seen that the mean scores of the teacher raters are closer to 3 or above than 2 in only four out of twenty cases in the Group 1 schools (AA- DD). This compares to nineteen out of twenty cases in the Group 2 schools. A MLQ score of 3 equated to a rate fairly often perceiving the headteacher to demonstrate the stated leadership behaviour. In Group 2 schools there were no assessments of relatively weak transformational leadership, however in Group 1 all of the headteachers scored below 2 in at least one transformational leadership area.

Table 5.4 Comparison of Transformational Collapsed Scale Mean Scores

Schools (1 - 8)		C1 IM (Transform ational)	C2 IIA (Transform ational)	C3 IIB (Transform ational)	C4 IS (Transform ational)	C5 IC (Transform ational)
AA	Mean	2.3833	1.5667	2.0500	1.8500	1.3833
ВВ	Mean	2.6053	2.2763	2.5000	2.2105	1.8947
CC	Mean	2.4444	2.1389	2.7639	2.2361	1.5417
DD	Mean	2.1985	2.2353	2.4706	2.6176	1.9779
EE	Mean	3.3947	3.0987	3.0263	2.8684	2.7697
FF	Mean	3.6250	3.4091	3.3409	3.1364	2.9886
GG	Mean	3.7381	3.2976	3.3690	2.9762	2.6429
НН	Mean	2.9196	2.7000	2.8304	2.6518	2.3571

The increased observation of strong, mainly transformational leadership qualities, however, does not necessarily mean that such qualities displayed by a headteacher will result in raised standards of attainment by the students. As shown in section 5.1 and as discussed in Chapter 2, the headteacher can only, at best, have a indirect relationship with the outcomes as Mulford and Silins (2003) in their review of the LOLSO research project clearly illustrate (Figure 2.3).

An assumption can be made that part of that extra effort, increased effectiveness and satisfaction that teachers perceive themselves to make is demonstrated by the impact on the organizational learning that they are directly involved in. However, that does not necessarily mean that standards of attainment have risen. There may be a positive relationship, but, if there is, it is indirect by nature. Griffith's (2004) qualitative study into elementary schools attempted to explore the relationship between principal transformational leadership and school performance. They also found a strong links to teachers, but were not able to link positive influences on teachers through to student outcomes. As Hallinger and Heck (1998) concluded, such assumptions of leadership effects on school outcomes cannot be warranted. For Hallinger and Heck (1998), they may be present, but they are likely to be small and require sophisticated research techniques to discover.

### 5.3 c) Effective Headteacher Leadership and Student Attainment – Summary

From the research study, it has not been possible to make a link between effective headteacher leadership style and student attainment. In assessing the influence of effective leadership styles, relative to student attainment the following appears to hold true.

Schools showing the greatest improvement in GCSE results have headteachers that display relatively strong leadership characteristics (both transactional and transformational).

Schools showing the greatest improvement in GCSE results have headteachers that appear to inspire teachers to a) put in extra effort, b) achieve greater work satisfaction and c) feel more effective in their work.

Headteachers' influence on standards of attainment can only be indirect and other factors may have a greater influence.

### 5.4 Do their skills match those of a transformational leader?

Burns (1978) described a transformational leader as one who leads through social exchange. Bass and Riggio (2006) note that they behave in ways to achieve superior results by employing one or more of the five core component scales (IM, IIA IIB, IS, IC) of transformational leadership. Inspirational Motivation, Idealised Influence (both Attributed and Behaviour) were discussed in Section 5.2 as relatively strong characteristics perceived to be displayed by the project headteachers. Visioning, as an aspect of Inspirational Motivation, is further discussed below along with the perceptions of staff development and staff needs associated with Intellectual Stimulation and Individual Consideration. The scores from the raters in Chapter 4 were not as high for these two transformational behaviours as have been reported in educational leadership research elsewhere (Barnett and McCormack, 2003; Leithwood and Jantzi 1999).

### 5.4 a) Vision and Motivation

All the headteachers were assessed to display transformational leadership qualities for at least some of the time and for those in Group 2 where the improvements in GCSE were at their greatest, more frequently. Of the five core component scales, Inspirational Motivation (IM) was the strongest quality of seven of the headteachers, with IIB being the strongest of the eighth followed by IM.

All eight of the headteachers were not just accepting of the challenge but confident in their school's ability to overcome it. Of the thirty-six variables designed to test the strength of leadership across nine scales of leadership, three IM variables featured in the top five. They expressed confidence that the goals will be achieved. They talked enthusiastically about what needs to be accomplished and they articulated a compelling vision for the future. Papalewis (1988) commented that

"school leaders are creative visionaries willing to take risks in pursuit of cherished values and able to cling to a vision with a tenacity that is contagious to nearly everyone" (Papalewis, 1988, p. 187).

The mean scores in table 5.10 (Using 0-4 scale) show the strength of optimism demonstrated by the headteachers when discussing the future.

<u>Table 5.6 – Variable 9 - Optimism about the future</u>

Schools (1 - 8)	Mean
AA	3.25
BB	3.10
CC	2.84
DD	3.60
EE	3.54
FF	3.74
GG	3.86
НН	2.72
Total	3.36

Schools AA-CC rate of progress has been, at best, steady in line with national improvements. School DD with a high rating of 3.6 out of 4 is not only performing worse than it was in 2003 (5 A\*-C GCSE results), its CVA places in the bottom 15% of similar schools and school EE (mean of 3.54 out of 4) with a CVA score of 967 is in the bottom 10% of similar schools. Only in school GG is there a strong relationship between a very high rating and academic success both in terms of GCSE results and CVA.

The relatively high range from 2.72 – 3.86, highlights that the majority of respondents in all the eight schools felt that the headteachers at least, fairly often, communicated that positive vision, but as other researchers have demonstrated (Sergiovanni 1990; Pawar and Eastman 1997; Barnett and McCormick 2003), communication of a vision does not necessarily equate to organisational acceptance of that vision. Barnett and McCormick's (2003) qualitative research in exploring the relationship between effective schools and vision and conclude that the influence of vision may be over-estimated. In their study, teachers were able to describe structures and policies in the school that reflected school vision and how these had changed teaching practices, yet they did not think that school vision had an influence in the classroom. Murray and Silins (2003) and Barnett, McCormick & Conners (2001) research further questioned the relationship between vision and outcomes, cautioning against the visionary headteacher, as they can sometimes distract teachers from concentrating on teaching and learning.

### 5.4 b) Staff Development and Staff Needs

The total teacher rating means for IS and IC were not as high as for other transformational leadership characteristics. As table 5.7 shows, schools AA, BB & CC returned relatively low means for IS (range 1.9375 – 2.2632) suggesting that most staff did not fairly often feel intellectually stimulated by their headteachers (A MLQ return of 3 equated with fairly often feeling intellectually stimulated). A similar suggestion holds for most of the schools (AA, BB, CC, DD & HH – range 1.5156 – 2.3879) when staff were asked the degree by which they felt individually considered.

Table 5.7 School Mean Scores – IC and IS

		C4 IS	C5 IC
		(Transfor	(Transfor
Schools (1 - 8)		mational)	mational)
AA	Mean	1.9375	1.5156
BB	Mean	2.2250	1.9250
CC	Mean	2.2632	1.6447
DD	Mean	2.6214	1.9857
EE	Mean	2.8718	2.7756
FF	Mean	3.1087	2.9457
GG	Mean	3.0114	2.6705
НН	Mean	2.6379	2.3879
Total	Mean	2.6429	2.3030

As Table 5.8 shows, the two variables within the IS scale scoring the lowest were the ones that suggest that the headteacher gets staff to look at problems from many

<u>Table 5.8 – SPSS Output – Descriptive Statistics – Intellectual Stimulation</u>

	N	Minimum	Maximum	Mean	Std. Deviation
30 IS	180	0	4	2.21	1.251
32 IS	178	0	4	2.28	1.275
8 IS	186	0	4	2.44	1.148
2 IS	171	0	4	2.78	.997

different angles (variable 30) and suggests new ways of looking at how to complete assignments (variable 32). At 2.21 and 2.28 the scores were low. Given the context of the schools and the need to rise, and remain, above a DCSF (DFES) designated minimum floor target as quickly as possible, it may reflect the directional influences of other non-transformational leadership skills. As indicated earlier, the pressure on schools facing challenging circumstances to improve is great. Ansell (2004) in his research concluded that governors need to employ headteachers that have a high level of

knowledge about improving schools facing challenging circumstances and are able to execute clear plans to a precise tight timetable. He sees this as critical to success. The reported scores may be representative of headteacher actions that are instructional, feeling that, to be able to meet the required improvements, there is not the time to consider alternative solutions.

The mean scores for Individual Consideration (see table 5.7) were lower than expected when compared to Avolio & Bass 2004 (see Appendices C). Individual staff consideration is perceived by the teaching staff to be the weakest transformational leadership quality displayed by the headteachers in the study. In addition, the headteachers in the study overestimated the degree by which they were seen to be considering teachers to be individuals, with individual needs and concerns. Again, the relatively low scores may reflect the need to 'get things done', particularly given the relative strength of transactional characteristics such as Contingent Reward and Active Management by Exception.

Individual Consideration, as perceived by the teaching staff may not match with the headteachers' perception of what is needed to move the school forward quickly, particularly if (as acknowledged in school AA) some staff jobs are under threat of being changed or lost. Again, this may point towards headteachers demonstrating some leadership strengths that are non-transformational.

Individual Consideration is a powerful motivator in bringing about change. Barnett and McCormick (2003) in their study of Australian school principles judged the most critical leadership transformational behaviour to be Individual Concern. The main conclusion of the Barnett and McCormick (2003) study is that leadership in schools is mainly characterised by relationships with individuals, and it is through these relationships a leader is able to establish her/his leadership and encourage teachers to apply their expertise, abilities, and efforts towards shared purposes.

'Indeed the research suggests that the leadership behaviour, individual concern, which included accessibility, encouragement, provision of structures and resource support and recognition, was fundamental to

transformational leadership practices in schools' (Barnett and McCormick, 2003, p. 142)

This study does not disagree with their findings, but consider this relationship can also be achieved through variables related to IM, II and IS.

### 5.4 c) Headteacher Perceptions

One of the assets of the research design is the triangulation between the views of a cross—section of teachers and that of their headteachers. Whilst this quantitative approach prevents a further exploration of some key issues arising from the findings, it does enable a two-way analysis from both the leader viewpoint and that of the led.

Table 5.9 Headteacher and Experienced Staff Comparison

	Raters	N	Mean
C1 IM (Transformational)	Female teacher	121	3.0847
	Male teacher	56	3.0848
	Headteacher's rating of themselves	8	3.0625
C2 IIA (Transformational)	Female teacher	121	2.6901
	Male teacher	56	2.5241
	Headteacher's rating of themselves	8	2.8125
C3 IIB (Transformational)	Female teacher	121	2.9132
	Male teacher	56	2.8304
	Headteacher's rating of themselves	8	3.0938
C4 IS (Transformational)	Female teacher	121	2.6446
	Male teacher	56	2.5402
	Headteacher's rating of themselves	8	2.8438
C5 IC (Transformational)	Female teacher	121	2.2500
	Male teacher	56	2.2054
	Headteacher's rating of themselves	8	2.9063
C6 CR (Transactional)	Female teacher	121	2.7748
	Male teacher	56	2.6920
	Headteacher's rating of themselves	8	2.8438
C7 MEA (Transactional)	Female teacher	121	2.2438
	Male teacher	56	2.4866
	Headteacher's rating of themselves	8	1.7500
C8 MEP (Transactional)	Female teacher	121	1.2190
	Male teacher	56	1.5179
	Headteacher's rating of themselves	8	1.3125
C9 Laissez - Faire	Female teacher	121	1.3202
	Male teacher	56	1.4286
	Headteacher's rating of themselves	8	1.0938

Table 5.9 considers the viewpoints of both the male and female teaching staff and compares those with that of the headteachers. With the exception of the responses to the Inspirational Motivation variables, the headteachers tended to overrate (shaded green) their transformational qualities and underrate their Active Management by Exception qualities compared to the ratings given from the experienced teaching staff. Avolio and Bass (2004) also found leaders generally tended to slightly overrate

themselves on all aspects of transformational leadership and underrate themselves on transactional leadership. Stevenson and Warne (2002) in their study also noted this factor. There is a large difference in the scores given to the Individual Consideration variables, with the headteachers perceiving that they give more individual consideration than rated by the teaching staff.

Also, of note from table 5.9 is the similarity of ratings between male and female respondents. Stevenson & Warne (2002) also noted that there was no significant difference between male and female responses, although females tended to score higher on the Individualised Consideration scale. This was not the case here.

Active Management by Exception was also viewed differently by the staff and the headteachers. The range from 2.2438–2.4866 from the staff raters is higher than the mean score of 1.67 reported by Avolio and Bass (2004). As stated, this quality centres upon closely monitoring staff performance and keeping track of mistakes, and may result from the school context with instructional leadership behaviours in play.

The difference in scoring under Laissez-Faire qualities (see table 5.12) is also worthy of comment. Leithwood and Jantzi (2005) when developing their model beyond that of Bass (1985) disregarded laissez-faire leadership because, for them, it had no consequential impact according to the indications of all the available evidence. However, the scores do produce an anomaly. Variable 28, 'I avoid making decisions' is rated far higher than anticipated by the teaching staff, and even more highly by the headteachers with five of them considering that they fairly often avoid making decisions. Leithwood and Jantzi, 1999; Sergiovanni, 1994; Collins, 2006 all commented upon the unique nature of the school as an organisation. This response may be a reflection upon this uniqueness. Hannay, Smeltzer and Ross (2001) talk of a democratic process of decision-making being necessary in challenging schools. Harris and Chapman (2002) in their research in schools facing challenging circumstances found that the effective leaders were able to develop teamwork and empower staff by extending the boundaries of participation in leadership and decision-making. These responses to variable 28 may be a reflection of this participation in the decision-making process, and an acknowledgement from both the headteacher and staff that there are elements of shared decision-making. If this is an acknowledgement of involving staff and encouraging

their participation then it becomes additional evidence of the display of transformational leadership characteristics and not a laissez-faire characteristic.

### 5.4 d) Non-Transformational Leadership Characteristics

The analysis of the findings show that the headteachers have transformational strengths, particularly in the areas of IM, IIA, IIB and, in Group 2 schools – IS. However, IC, rated by some researchers (Barnett and McCormick, 2003; Mulford and Silins, 2003) to be a key driver in terms of organisational effectiveness, is perceived to be underdeveloped. Strong transactional qualities are evident in relation to the variables associated with Contingent Reward and it is stronger in those schools whereby the headteachers are perceived to be relatively strong in transformational leadership behaviour. There is also evidence of stronger direct influence by the headteachers on monitoring performance and checking upon deviations from the standard (MEA). However, where this occurs there is no association between the strength of these leadership characteristics linked with actively monitoring mistakes and faster student achievement.

Underlying these findings on Individual Consideration and particularly on Active Management by Exception is the suggestion that the context of facing challenging circumstances is resulting in the possibility of a more direct instructional role being performed by the headteacher leader than may have been observed in other organisations or other categories of school. Whilst acknowledging other interpretations, this may support an explanation of the responses to variable 17. This variable was designed to measure passive management by exception, a transactional characteristic associated with weak and unsatisfactory leadership practice. As such the ratings should have been low, but the headteachers in the faster achieving schools rated themselves relatively highly in believing 'if it ain't broke, don't fix it'. The many barriers to progress (Myers, 1995; West et al, 2005; Harris and Chapman, 2002; Barker, 2005) creates a need for prioritisation. As Keys, et al (2003) concluded it is not so much the nature of the style of leadership that makes the headteacher effective, rather than their ability to prioritise and thereby establish a direction, motivate staff and build capacity by developing staff and harnessing resources. By leaving the 'unbroken', it may be that headteachers in challenging circumstances are able to focus upon the greatest need.

This is consistent with other research. For example, Eden (1998) has suggested transformational leadership is effective when it incorporates transactional leadership practices that are sensitive to teachers and accepted by them. Indeed, Leithwood and Jantzi (1997, p.314) argued that these types of management practices are required in schools because "the right things need to be done and they need to be done right".

# 5.4 e) Are headteachers in schools facing challenging circumstances transformational headteachers? - Summary

Of the five component scales of transformational leadership, all the headteachers displayed transformational leadership qualities and most did so regularly. All the headteachers in the schools with the largest improvements in GCSE 5A\*-Cs were seen to be relatively strong in the display transformational leadership characteristics. However, other qualities were also in evidence with relatively strong transactional qualities being displayed with a suggestion that instructional leadership qualities are also present.

The nature of the school as an organisation, the context within which the school exists, and the need to be seen to be raising standards of attainment all impact upon the style of leadership. Barnett and McCormick, 2003 had reported on the principals in their study describing leadership behaviours that included transactional leadership practices, such as ensuring that policies, teaching programs and teaching practices were meeting external requirements. Eden (1998) had considered Israeli school principals to be facing contradictions of, on the one hand working in a highly bureaucratic system with its structures and routines, and, on the other having to assume leadership and to transform the system by changing the relations between the leadership and the staff. Schools facing challenging circumstances face a similar paradox.

This paradox was noted by respondents in the Chapman and Harris (2002) study. Their work into leadership in challenging schools considered also that the most prevalent approach was one that created social capital by building relationships and distributing power to others.

As one of their respondents commented:-

'It is no good having your standard leadership style in a school like this. The problems are too immediate, too pressing. It is more about critical delegation, about maintaining expectations, about giving others power and responsibility....What is important is the leader's fundamental belief that the school can change and that staff and students the key to that change.' (Chapman and Harris, 2002, p. 18)

All the project headteachers accepted the challenge to lead the transformation of learning. The Hay Group (2000) report emphasis on headteachers having drive, the ability to lead and provide clear direction, and to be able to enthuse and motivate others appear to have been clearly identified by the respondents. Not all of the study's headteachers appear to have achieved this through strong social exchange processes as described by Burns (1978) in terms of being a transformational leader. The headteacher of school AA, for example, was perceived to have stronger transactional leadership qualities compared to relatively weak transformational characteristics than the headteacher of school DD, yet the former had been acclaimed very good by OFSTED and was improving faster than school DD.

Reynolds et al. (2001) were wary of prescribing any 'one right way', and as Hopkins (2007, 2001) comments, transformational leadership behaviours may a necessary, but not sufficient, requirement for school improvement. This thesis would support that statement.

## 5.5 Can a set of leadership behaviours be identified as a model for similar schools in challenging circumstances?

Glickman (2003) reminds us that in seeking 'generalisations' and 'lessons' we need to be aware that the more successful a school becomes, the less it becomes a practical model for others to imitate.

### 5.5 a) Stable Leadership

All of the headteachers had worked successfully within the school as the senior leader for at least three years. With significant barriers to be overcome, success is not always immediate, but as some of the headteachers have demonstrated, it is possible for schools in challenging circumstances to break away from a low attainment culture complete with the low expectations and low staff morale that can often accompany it. Ansell (2004), whilst acknowledging the difficulties of recruitment, recognises the need to appoint a suitably experienced person who is prepared to make a long-term commitment to the school. As the Macbeath (2005) evaluation of 'schools facing exceptionally challenging circumstances' comments, instability of senior leadership in challenging schools is a significant problem making periods of sustained risk-taking very problematic. Even if the headteacher remains constant, changes (sometimes necessary) to other elements of the leadership team, coupled with recruitment and retention of teaching staff create an inevitable instability from within which it becomes very difficult to bring about the necessary changes and development.

If a transformational leadership model based upon social exchange is a necessary condition, it requires a) an element of stability from within the teaching staff and b) a headteacher supported by a senior leadership team with the appropriate skills and qualities capable of demonstrating a faith and commitment to the organisation.

Both may be difficult to achieve, and as MacBeath (2006) summarises, they were not in evidence in the evaluation of the schools facing exceptionally challenging circumstances. The challenges of leadership are disproportionately hard both in professional and personal terms, and the evidence suggests (Ansell, 2004) that not enough professionals are applying to be headteachers in these schools. As an alternative, Hopkins (2007) advocates external partnerships, for example, two schools working very closely together through a School Federation arrangement with an executive headteacher overseeing more than one school. The interchange of both staff and headteacher can help create stable conditions in the school facing challenging circumstances, but it takes time to create the social capital necessary for sustained improvement.

Although the project was focused upon headteachers, the nature of transformational leadership with its empowerment of other staff, can lead to distributed leadership including teacher leadership. This wide spread of leadership beyond the headteacher further develops the necessary social capital. Once a vision is subscribed to by most stakeholders, including the school governors, and a direction set, it is possible for the school to withstand the change of a headteacher without incurring significant instability.

The headteachers in the project were all identified as being confident in tackling the issues and were able to sell the vision to colleagues. Their time in post helped to demonstrate that they were concerned for the children and the establishment, and not just 'working a ticket' for themselves, but working beyond self interest for the school community.

Stability of leadership, therefore is seen an essential factor, and a precondition, for any sustainable school improvement model.

### 5.5 b) A Model for Leading the Learning in Schools Facing Challenging Circumstances

The barriers to progress that many schools facing challenging circumstances face are many, but schools can, and do, break through them and away from a culture of low attainment and low expectations.

None of the project schools were deemed to be failing. All were making at progress, but at different rates. The first criteria for improvement – stable leadership - had been established

Transformational leadership qualities, particularly in terms of Inspirational Motivation, Idealised Influence and Intellectual Stimulation appeared to be relatively strong features displayed by most headteachers, and by all the headteachers leading schools that had made the greatest progress in terms of 5 GCSEs A\*-Cs. The findings show that all the headteachers had different strengths, but their strongest was that of being able to inspire and motivate colleagues, talking enthusiastically about the future and developing a shared vision. Harris and Chapman (2002) in their research had concluded that the overarching message about leadership in schools facing challenging circumstances was

one of community building in its widest sense, through the developing and involvement of others. That had involved building trust and sharing vision that extended beyond teaching staff and involved other stakeholders, particularly the students. There needed to be a belief that all student can succeed.

Despite the schools being in different contexts with different challenges, all staff felt able to have a degree of association with the headteacher and felt that the relationship resulted in them making extra-effort and being more effective. The findings suggested a positive relationship between transformational leadership qualities and perceived school effectiveness.

Another strong set of characteristics displayed by the headteachers centred upon the transactional leadership behaviour of Contingent Reward. Their strengths in this area mirrored their transformational leadership strengths. Monitoring of performance, recognition for satisfactory performance appeared to be strong characteristics, again most strongly featured by the headteachers in the faster achieving schools. Headteachers in schools facing challenging circumstances appeared adept with both transformational and transactional leadership practice.

The results also suggested that other leadership attributes were being displayed by headteachers in schools facing challenging circumstances to create the stability necessary for further sustained improvement and to 'fast-track' towards the vision.

First, all the headteachers showed relative strengths on Active Management by Exception (with AA scoring very highly). These results were significantly higher than the norms detailed by Avolio and Bass (2004). The headteachers were focusing attention on irregularities, mistakes, exceptions and deviations from standards. They tended to direct attention towards failures to meet standards. Harris and Chapman (2002) also noted that, alongside their ability to invite others to share the vision the headteachers could display firmness in relation to values, expectations and standards, and that, on occasion, this firmness could show itself as ruthlessness.

Secondly, the scores for the Individual Consideration of staff were much lower than the norms (Avolio and Bass, 2004 - See Appendices C), and lower than the headteachers'

view on their IC skills. Qualitative studies into transformational leadership practice in schools (Eden, 1998; Geisel, 2003; Mulford and Silins, 2003; Barnett, McCormick & Conners, 2000) had all demonstrated the importance of Individual Consideration in terms of sharing the vision and moving the school organisation forward. Barnett, McCormick & Conners (2000), for example, concluded that transformational behaviours that led to individual concern being shown were more likely to result in the teacher putting in extra effort, gaining more job satisfaction and helped them become more effective in terms of achieving performance focused goals. The project headteachers did not score highly for their coaching attributes nor for treating all people as individuals. Other low scores were attained with regard to seeking different perspectives and getting staff to look at problems from different angles.

Thirdly, in terms of CVA, two of the three highest achieving schools returned relatively low scores on both the transformational leadership characteristics and on Contingent Reward. Both schools were motivated by the headteacher and both headteachers scored relatively highly on actively managing by exception.

The above factors suggest the implementation of instructional leadership behaviours with the technical knowledge (having the expertise, skills, experience and understanding of a school facing challenging circumstances and the barriers confronting them) that underpins instructional leadership practice. As both Harris and Chapman (2002) and West, Ainscow & Stanford (2005) suggest, possibly the most important attribute of the headteacher in a school facing challenging circumstances is the ability to analyse the context and then act as quickly as possible. This requires both technical knowledge and instructional leadership. Instructional leadership encompasses hierarchies and top-down leadership, where the leader is supposed to know the best form of instruction and closely monitors teachers' and students' work.

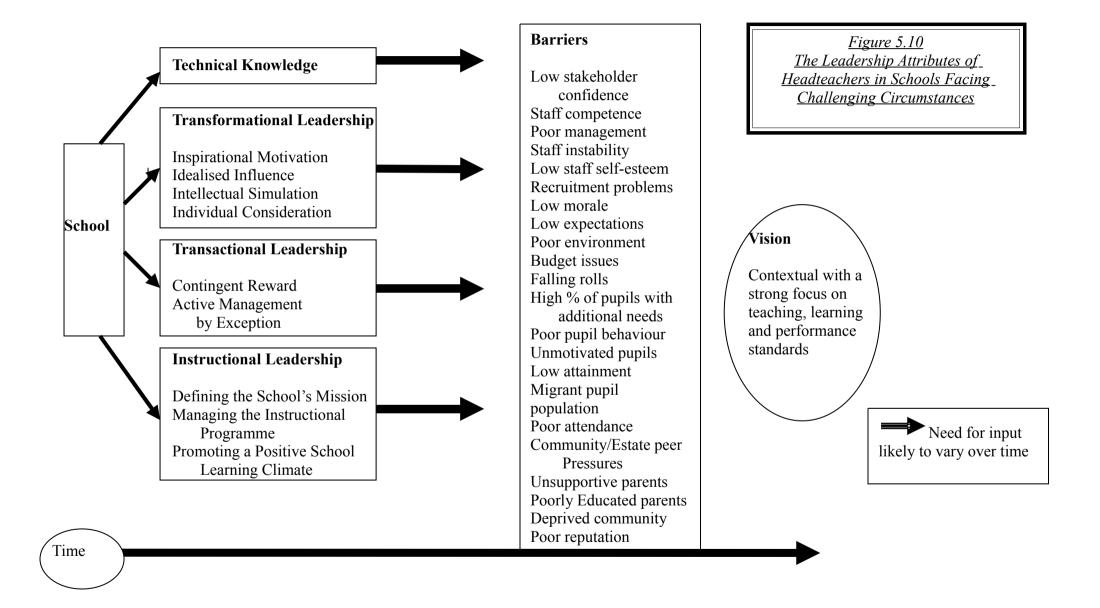
Instructional and transformational leadership may appear to create a contradiction, however, Eden (1998) encountered a similar situation in his Israeli based research project. In Eden's study they resolved this situation by engendering a culture whereby the teachers' ideas and behaviour match that of the leaders' interpretation of reality. The study demonstrated that the principals were then able to move the organisation forward by a) shaping the extent and content of issues requiring teacher participation,

b) defining good performance c) protecting and rewarding the conforming teachers whilst at the same time threatening and sanctioning others. This thesis was unable to explore the development of this type of culture, however, its findings would not be inconsistent with this approach.

This paradox was further explored by Marks and Printy (2004). They suggested that strong transformational leadership by the principal was essential in supporting the commitment of teachers. However,

'because teachers themselves can be barriers to the development of teacher leadership, transformational principals are needed to invite teachers to share leadership functions. When teachers perceive principals instructional leadership behaviours to be appropriate, they grow in commitment, professional involvement, and willingness to innovate. This instructional leadership can itself be transformational'. (Marks and Printy, 2004, p. 393)

Figure 5.10 illustrates the attributes of leadership required to realise the vision. School improvement is a journey over time requiring a range of leadership skills. For challenging schools, instructional leadership and some components of transactional leadership may, at this moment in the school's development, be more suitable than some components of transformational leadership. These schools are likely to be a cause for concern, and as a result, a more direct 'top-down' approach focused upon instructional improvement may be necessary. Over the length of the journey some



barriers will be overcome, but others, for example, community deprivation remain a factor outside of the school's control, and, as such, are likely to be a long term barrier.

Long term sustainability requires a strong focus on a vision that is contextualised, focused upon teaching and learning and upon the constant need to raise standards of attainment thereby creating raised opportunities for the students. Priorities will change, and that will require changes in appropriate leadership styles with headteachers needing to be able to adapt.

As figure 5.10 illustrates the barriers confronting the headteacher of a school facing challenging circumstances are great. Myers (1995) describes a 'competency line' below which the school cannot use normal school improvement techniques. Headteachers with the technical knowledge of positive strategies needed to remove barriers, with the ability to prioritise and instruct others how as to how to deal with these issues may be more effective in moving beyond the 'competency line' than headteachers with strong transformational skills. Once school starts to show improvement, for sustainable irreversible development other leadership skills may become more important.

Heads with the technical knowledge, and also with ability and skills adjust the intensity of their transformational, transactional and instructional leadership may be well placed to see the journey through. Given that most headteachers will have strengths in some areas but not, the trick for governing bodies and local authorities is to select the headteacher with the right mix of skills for that moment in a school's development. Figure 5.10 is not a model of 'what works' for schools in challenging circumstances but a recognition that transformational leadership on its own is unlikely to be enough and that varying degrees of technical knowledge, transactional and instructional leadership are necessary, particularly where the barriers are at their greatest and the need for rapid improvement seen as a precedence.

### 5.5 c) Fitting the Model to Individual Schools – Context

The context within which the schools sits, and the contextual barriers facing it, are all different. Pawar and Eastman (1997) has shown that vision is likely to be more or less appealing depending on the extent to which it appears to be relevant to a particular context. Sergiovanni (2001) commented that solutions are not necessarily easy to generalise. Barriers to learning are often localised and require local solutions or rather solutions that fit local conditions.

Technical knowledge is contextual and can be seen as 'applied leadership', taking all the effective strategies centred upon teaching and learning and applying them to the local circumstances and conditions. This technical knowledge includes managing the interactions between local authority, governors and, in some cases, diocese.

Southworth's (2004) research discusses the external factors impacting upon the school, and comments on the need for the headteacher facing challenging circumstances to be versed in local external manoeuvring. The individuality of schools is also discussed by Barnett and McCormick (2003), concluding that school contexts vary along with the external environment. They comment on the need for principals to recognise the possibility that context may make leadership behaviours more or less effective.

'An important implication for a practising principal is that she/he must know and understand the contextual constraints placed on a school by the internal and external environment. Moreover, a principal must be able to adjust his/ her leadership behaviours in order to ensure that leadership is relevant and assists a school towards positive outcomes'. (Barnett and McCormick, 2003, p. 144)

The research project clearly identifies effective components of leadership style and attributes for successful headship in schools facing challenging circumstances. What the research does not investigate is the extent by which these indicators of effective headteacher leadership are different. Nor does it attempt to measure the strength of instructional leadership other than to recognise its presence through the strength of two of the transactional component scales.

Also, it did not investigate, therefore, cannot comment upon the degree by which these indicators are different from, or the same as, the leadership styles and strategies of successful leaders in other schools not facing challenging circumstances. The lack of any comparative study to draw on prevents the development of any 'ideal' model, but provides another area of further research worthy of study.

### 5.6 Reflections on the Research Design

### 5.6 a) Limitations of the Research (including flaws in the design)

The research design was intended to provide data on the strengths of transformational leadership of headteachers in schools facing challenging circumstances. A research tool (the MLQ 5X) was selected due to its successful application worldwide testing transformational leadership.

203 respondents provided data on eight individual schools. The response rate ranged from between two – five times the number of ratings submitted on the majority of the studies involving the MLQ 5X (Avolio and Bass, 2004, normative statistics - See Appendices C). The MLQ 5X also enabled a comparison between both the leaders and followers to be made with this triangulation strengthening the study's validity. The resulting findings and analysis provided clear indicators regarding leadership styles for successful headship in such schools. One of it's limitations, however, was it's inability to prescribe a style best suited for this type of school.

Secondly, it took a very limited measure of student outcome (5 GCSE A\*-Cs). Whilst this is a popular statistic widely used to make assessments about the strength of school, it is open to manipulation. For example, additional language students sitting GCSEs in their first language or through the wide scale use of acceptable alternatives, BTEC and ALAN (Adult Literacy, Adult Numeracy) courses. This manipulation may not be a limitation of the research as they are examples of leadership responding to context. Nonetheless, this statistic only measures a minority of the school population and does not measure student achievement that can arise in many different forms from enhancing

career opportunities and achieving sporting and artistic recognition to remaining clean of drugs or staying out of prison. As Englefield (2001) comments

'schools are distinctive and one school's effectiveness cannot be simplistically compared with another's. A disservice is done to all schools, but particularly schools in challenging contexts when communities are asked to judge their schools' effectiveness on academic outcomes alone'. (Englefield, 2001, p. 5)

Whilst the study was able to indicate various strengths of leadership and relate them to this narrow definition of student outcomes it was not able to link any leadership style with student achievement in general. Even with a far more sophisticated measure of achievement the indirect relationship between school leadership and student outcomes would have made any finding, relative to other influences, difficult to validate.

Thirdly, the findings suggested other factors were influencing outcomes. Elements of instructional leadership were assumed to be in play resulting from some of the transactional component ratings and the relatively low ratings on Individual Consideration, this instructional leadership requiring the application of a contextualised technical knowledge. A qualitative research tool, such as a series of semi-structured interviews would have allowed for the relative strengths of these behaviours and attributes to be analysed in the same depth as the transformational qualities.

The use of attitudinal questionnaires also limits the strength of the findings. Lakomski (1999) had been critical of the use of questionnaires to assess follower perceptions of leadership behaviour commenting that they did not tap into the respondents' mental processes. He believed them to merely uncover fabricated views of leadership that 'may or may not refer to something "real" in the world'.

### 5.6 b) What I would do differently

The time constraints and resource limitations of this type of study restrict the number of outcomes that can be reliably tested for and reported. Recognising these parameters, on reflection, I would wish to revise the study in several ways.

First, there is the need to use a more sophisticated measure of school 'success'. As commented upon above, 5 A\*-C GCSEs is a very limited measure of whole school student achievement.

Secondly, the questionnaire requires greater adaptation to reflect the school as a unique organisation. It resulted in several variables needing to be disregarded to sustain reliability. For example, variable 15 'Spends time teaching and coaching'. Part of the issue is that this variable may have been interpreted either as a non-leadership role — that of a classroom teacher or as an example of modelling (Idealised Influence) but not as a staff developmental item (Individual Consideration). Also as discussed above, the variable 28 'avoids making decisions' may have been interpreted (particularly by the headteachers themselves) as development of social capital by empowering and involving others in the decision-making process (Inspirational Motivation) and not as part of a Laissez-faire scale.

Thirdly, and of the greatest significance, the study would have benefited from a mixed method approach, with follow-up semi-structured interviews with both a sample of the raters and the headteachers. The quantitative method is good at gaining a consistency of response promoting the study's reliability, however, it lacks the flexibility of a semi-structured interview. Issues of perception, context, technical headteacher knowledge and mix of leadership style all need further exploration, and a limited series of interviews may have provided some additional evidence to strengthen or disregard some of the interpretations placed on the quantitative data.

### 5.6 c) Questions for Further Research

There is a need for further research in order to help guide policy and practice. The study set out to explore the strengths of transformational leadership within schools facing a context of challenging circumstances. The strength of transformational leadership in such schools appeared to demonstrate that such qualities are of importance in their headteachers. Also of importance, however, were non-transformational qualities associated with aspects of transactional and instructional leadership. Several researchers (Harris and Chapman, 2002; Mulford and Silins, 2003; Day et al. 2000; Cawelti, 1999; Barnett and McCormick, 2003; Southworth, 2004) have identified the importance of context when considering leadership in schools. Day, et al (2000) consider that there is a contingency approach to leadership that rejects the conception that there is a best style that is appropriate for all situations, and this thesis's findings support that statement. Day et al. (2000) conclude that different leadership styles emerge according to context and situation and that they are differentially effective depending upon those situations. This thesis identified schools making progress all within a context of facing challenging circumstances, but those challenging circumstances will be individual to the school. Whilst it was possible to identify common factors, they will be present in schools in different intensities and the way in which they interrelate will, in part be governed by their intensity. Therefore, questions worthy of further consideration include

What are the main contextual barriers to progress and what leadership qualities and strategies are needed to help overcome them?

Are some contextual barriers so impervious that no leadership style can be effective in improving the school?

As schools overcome barriers to progress, how capable are headteachers, or how necessary is it for them, to adapt their leadership styles?

Are there lessons in leadership to come from those headteachers in schools that are free of particular contextual barriers that schools can control or influence?

Leading the Teaching and Learning — A Study of transformational leadership in secondary schools facing challenging circumstances - Graham Wright

These examples of additional research would inform policy and give a sharper edge to practice.

# Leading the Teaching and Learning - A study of transformational leadership in secondary schools facing challenging circumstances.

### **CHAPTER 6 - CONCLUSION**

### **6.1 The Research Hypothesis**

This research set out to consider the issues surrounding headteacher leadership in schools facing challenging circumstances. It adopted the hypothesis that headteachers with strong transformational leadership behaviours were more effective in raising standards of student attainment within a challenging school context than headteachers with other types of leadership behaviour.

Schools facing challenging circumstances tend to serve communities with high levels of economic and social deprivation and low levels of parent education. They often have similar characteristics associated with staffing and management problems, low staff morale, budget issues, high proportions of students with additional needs, poorly motivated students with low prior attainment and low self esteem and a poor local reputation. Nearly all schools facing challenging circumstances, populate the bottom of the published performance league tables in terms of GCSE outcomes. However, in 2003, 435 out of the 494 secondary schools identified in this category were making at least satisfactory progress, whilst nearly one-third were deemed to be making at least good progress (HMI, 2003). The aim of the study was to test if the headteacher leadership in schools making good progress was transformational, and if so, was there a link between the strength of the transformational behaviours and student outcomes in such schools.

The thesis focus was original as few educational studies link leadership behaviours to measurements of student attainment, and none have been done on schools within the English education system that are officially designated to be facing challenging circumstances.

#### 6.2 Origins of the Research

The Hay Group (June 2000) in its report for the National College of School Leadership (NCSL) on 'Raising Achievement in Our Schools' identifies the highly effective headteacher as providing transformational leadership. The Department for Education and Skills emphasised four key outcomes required of successful leadership from headteachers (National Standards for Headteachers, 2004). This involved the creation of a positive ethos; ensuring that all teachers perform to their best; using the available resources effectively and securing the commitment of the wider community. For the DFES, to be effective in delivering these outcomes it requires the headteacher to provide transformational leadership.

James McGregor Burns (1978) first developed the concept of transformational leadership after studying Weber's (1947) work on leadership authority. Burns (1978) defined the transformational leader as one that recognised the transactional needs in potential followers, but went further in seeking to arouse and satisfy higher needs, to engage the full person. In so doing they transcended their own self-interests for the good of the group and motivated the group to contribute more than would usually have been expected. There is no unitary concept of transformational leadership within education (Leithwood 1996, West, Ainscow & Stanford 2005, Southworth, 2001, Hallinger (2003), but as Hallinger (2003, 2005) comments, it has become an extremely popular image of ideal practice in schools. Leithwood and Jantzi (1996) had argued that transformational leadership was well suited to the challenges of current school needs to restructure.

There is not a significant amount of existing research into successful leadership in schools facing challenging circumstances. Keys, et al (2003) in their worldwide review of the literature databases since 1990 identified 28 texts that they considered relevant. Shamir and Howell (1999) commented that most writings about transformational leadership pay little or no attention to contextual considerations. In addition, Harris (2004) acknowledged that there was an important blind spot in the research in determining what form/s of leadership practice contribute to sustained school improvement with Mulford and Silins (2003) commenting that the link from leadership and student outcomes is a rare event in the educational leadership and school

improvement research literature. The scarcity of contextual data related to student outcomes provided the researcher with an opportunity to add to the knowledge in this area.

A quantitative approach was adopted supplemented by DFES reports and data, with the main research tool being the Multifactor Leadership Questionnaire (Version 5X) developed by Bass (1985) to test for transformational leadership behaviours in organisational leaders. As a quantitative research tool, it did allow for the researcher to investigate a larger number of institutions and gauge the responses from a far larger sample than would have been the case, however, it did not allow for the relative strengths of the identified behaviours to be analysed in the same depth as may have evolved from a qualitative review.

#### **6.3 Limitations of the Research**

The research has been limited. It focused exclusively upon the strengths of leadership behaviours of headteachers in eight schools deemed to be facing challenging circumstances. It did not consider that other factors (including a wider spread of leadership) may impact significantly upon moving a school facing challenging circumstances forward. It did not consider the strength of classroom conditions on student outcomes including good quality teaching. Whilst recognising that headteacher leadership can, at best, only have an indirect effect on student outcomes, it does, however, attempt to consider the leader's strength of influence on these other factors that, in turn, directly impact upon student outcomes. The evidence base is also limited being largely drawn from an attitudinal scale reflecting the views of headteachers and their teaching staff. Views of other stakeholders such as other school colleagues, parents, governors, students, community members and the Local Authority have not been considered.

## 6.4 The development of effective leadership in schools facing challenging circumstances – implications of the research

Overall, the main research implications relating to effective headteacher leadership in schools facing challenging circumstances are outlined below.

The study appears to support aspects of the research work of Harris and Chapman (2002); Barker (2005); Day et al (2000) and Leithwood and Jantzi, (1997). All of whom found that the headteacher practice was underpinned by a set of personal and professional values that put people before the needs of the organisation. In response to the first key question, the study found that underpinning these professional values was an ability to inspire and motivate; to emphasise a collective sense of mission based upon actions; to use power only when necessary and not for personal gain; to agree and assign tasks to staff and to appropriately reward them when those tasks were completed; to be a risk-taker but to take the right course of action and be consistent in those actions; to have a contextual knowledge to direct the school forward. These were the effective leadership skills and qualities of headteachers in schools facing challenging circumstances.

Leithwood and Jantzi (1996) considers that there was a small amount of compelling empirical evidence connecting principal/headteacher leadership practice with student outcomes, but the research design employed by the researcher was not sophisticated enough to make the connection, even though most of the higher performing schools had headteachers with high levels of transformational leadership. As Hallinger and Heck (1996) stated, studies that inquire only about the direct effects of school leadership on student outcomes tend to report weak or inconclusive outcomes. The research did show that schools with the greatest improvement in GCSE results did have teachers who are more prepared to put in an extra effort, have greater work satisfaction and feel more effective in their work, but it could not make a more direct link with outcomes, therefore, in response to the second key question asked, it was not able to assess the influence of leadership style on student attainment.

With regard to the third question centred upon whether the leadership skills demonstrated were that of a transformational leader. All of the headteachers appeared to have embarked upon a journey of transformation, but were at different stages, and all had transformational leadership qualities, but as Hopkins (2007) has suggested, this may not be enough. Other leadership styles were both measured and implied. The transactional measures appeared to suggest elements of instructional leadership. Lambert (2002) contends that whilst the days of the lone instructional leader have gone,

with the participation of other educators there can be shared instructional leadership. Chapman and Harris (2002), Reynolds et al.(2001), Eden (1998)' Barnett and McCormick, (2003) Hallinger (2005) Day et al (2000), Marks and Printy (2004) all knowledge that for headteachers there is not one sole form of leadership that is effective. This study supports Day et al (2000) concept of values-based contingency leadership. This approach is based on the view that is it the personal moral values of the leader that drive them and their followers forward and therefore determines the choice of leadership style. The contingency approach to leadership rejects the idea that there is a best style suitable for all situations and that different leadership styles emerge according to context.

Finally, can a set of behaviours be identified as a model for similar schools facing challenging circumstances? There are clear indicators regarding leadership style and the effective attributes necessary for successful headship in schools facing challenging circumstances. A values-based contingency leadership requires transformational qualities. It assumes a contextual technical knowledge. It recognises that context may create a need for other more appropriate styles of leadership if the school is to move quickly away from being classified as a school facing challenging circumstances.

Sergiovanni (2001), West, Ainscow & Stanford (2005), Southworth (2004) were some of the researchers that recognised that each school context will be different, with the barriers to learning localised, and that a leadership style and strategies effective in one challenging school may not work in another. As stated in Chapter 5, the study did not explore the extent of the difference between the styles and attributes deemed as effective in moving schools in challenging circumstances forward. Neither did it consider the leadership styles and strategies of successful leaders in other schools not facing challenging circumstances. The lack of any comparative study to draw on prevents the development of any 'ideal' model, but provides another area of further research worthy of study as there are probably lessons for policy and practice that would arise from a study of leadership in schools free of particular contextual barriers.

Other suggestions for further research include consideration of a longitudinal study on the adaptability of headteachers to change their styles as they move successfully through the contextual barriers and a consideration of the main contextual barriers to progress and the leadership qualities necessary to overcome them.

### **6.5** Recommendations for effective leadership in schools facing challenging circumstances

The above research has not clearly established links between leadership style and student outcomes, and neither has it been able to detail a model of good practice that guarantees an effective transition for schools away from a formal classification of facing challenging circumstances. However, the research has established a number of elements that constitute effective leadership characteristics and attributes employed by headteachers in schools facing challenging circumstances. In addition, it has been able to demonstrate that where these elements have been employed in the greatest intensity, the greater has been the school improvement (as defined in terms of 5 GCSE A\*-Cs). In conclusion, I would recommend that headteachers in schools facing challenging circumstances need to be able to:-

demonstrate strong ethical and moral behaviours, highlighting the importance of trust, care and relationships and attach importance to the creation of conditions for the building of effective relationships;

inspire and motivate their staff through leadership practice that is peopleorientated and empowering;

have a strong community vision and a confidence that the vision is attainable;

have a good understanding of the school context and a good grasp of the technical knowledge necessary to address the context;

recognise the strength of their motivational influences on teaching staff;

recognise the individual needs and concerns of staff, conscious that individual staff consideration are perceived by teachers to be the headteachers' weakest transformational leadership quality;

have systems in place that give them a clear assessment of their transformational leadership qualities as headteachers in schools where attainment has not risen quickly tend to over-estimate themselves;

make good use of the transactional leadership component of contingent reward;

demonstrate that, if necessary, they are able to actively monitoring mistakes and deviations from the standard;

mix their leadership styles including the use of instructional aspects of leadership were necessary;

be adept at alternating between those appropriate leadership styles best placed to match the school's current stage of development

There needs to be a recognition that stable leadership (be it widely distributed or just focused upon the headteacher) is a necessary pre-condition for progress. Also, the school vision needs to be centred upon teaching and learning with realistic targets of raised student performance based on the premise that all children can achieve.

#### **6.6 Final Conclusion**

Results from this thesis have contributed to the body of literature on headteacher leadership styles in school facing challenging circumstances. Whilst demonstrating that headteachers are adept are using different styles of leadership, it demonstrates the need for those headteachers to be value driven, willing to go beyond self-interest, and wanting to empower others. For effective headteacher leaders, in leading the teaching and learning, transformational leadership behaviours predominate, however, they are

Leading the Teaching and Learning — A Study of transformational leadership in secondary schools facing challenging circumstances - Graham Wright

able to switch styles depending upon the context of the school and its current position on its road to school improvement.

#### **Leading the Teaching and Learning**

- A study of transformational leadership in secondary schools facing challenging circumstances.

#### **CHAPTER 7- REFERENCES**

- **Alimo-Metcalfe, B & Alban-Metcalfe, R. J.** (2001). The development of a new Transformational Leadership Questionnaire. *The Journal of Occupational and Organisational Psychology*. 74(1), pp. 1-27.
- **Ansell, D.** (2004). *Improving Schools Facing Challenging Circumstances: Perspectives from Leading Thinkers.* Nottingham, NCSL.
- **Antonakis, J. & House, R**. (2002). An analysis of the full-range leadership theory: The way forward. In B Avolio and F Yammarino (Eds), *Transformational and charismatic leadership: The road ahead* (pp. 3-33) Amsterdam: JAI Press.
- Antonakis, J; Avolio B J; & Sivasubramaniam, N. (2003). Context and leadership: An examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire. *The Leadership Quarterly*, 14 (3), pp. 261 295.
- **Archer, J.** (2004) Major Study to Identify What Good Leaders Do Right. *Education Week*, 9/8/2004, Vol 24 Issue 2, pp. 8 11.
- **Avolio, B, J. & Bass, B. M** (2004). *Multifactor Leadership Questionnaire. Manual and Sampler Set 3<sup>rd</sup> Ed.* Redwood City, CA. Mindgarden Inc.
- **Bandura, A**. (1986) *Social Foundations of Thought and Action: A Social Cognitive Theory*. Prentice-Hall. Englewood Cliffs, NJ.
- **Barnett, K., & McCormick, J.** (2003). Vision, relationships and teacher motivation: A case study. *Journal of Educational Administration, 41 (1)*, pp. 55 –73.
- Barnett, K., McCormick, J., & Conners, R. (2000). Leadership behaviour of secondary school principles, teacher outcomes and school culture. Sydney. Australian Association for Reseach in Education.
- Barth, R. (2002) Improving Schools From Within. San Francisco. Jossey-Bass.
- **Bass, B. M**. (1997) Does the transactional/transformational leadership transcend organizational and national boundaries? *American Psychologist*. *52*, pp. 130 –139.
- **Bass, B. M**. (1990) Bass and Stodgill's Handbook of Leadership: Theory, Research and Managerial Expectations. New York. Free Press.
- **Bass, B. M**. (1985) *Leadership and performance beyond expectations*. New York. Free Press.

**Bass, B. M. & Avolio, B, J.** (1994). Improving organisational effectiveness through transformational leadership. *Thousand Oaks. CA. Sage*.

**Bass, B. M. & Avolio, B, J.** (1993). Transformational leadership: A response to critiques. In Chemers, M & Ayman, R. Leadership theory and research: Perspectives and directions (pp. 49 – 80). New York. Academic Press.

**Bass, B. M. & Avolio, B, J**. (1990). *Transformational Leadership Development: Manual for Multifactor Leadership Questionnaire*. Palo Alto, CA. Consulting **Psychologist Press.** 

**Bass, B. M. & Riggio, R, E**. (2006). *Transformational Leadership*. 2<sup>nd</sup> Ed. London. LEA.

**Bassey, M**. (1999). *Case Study in Educational Settings*. Buckingham. Open University.

Beck, R N. (1979). Handbook in Social Philosophy. New York. Macmillan.

Bell, J. (1999). Doing Your Research Project. London. Open University Press.

Belson W.A. (1986). Validity in Survey Research. Aldershot. Gower.

Bennett N, Wise C, Woods P, Harvey J, (2003). Distributed Leadership: A Review of the Literature. Nottingham, NCSL.

Borg, W.R. (1963). Educational Research: An Introduction. London. Longman.

**Bryman**, A, (1992). *Charisma and Leadership in Organisations*. Newbury Park, CA. Sage

Bryman, A. (2004). Social Research Methods. 2<sup>nd</sup> Ed. Oxford. University Press.

**Burnham-West, J; & O'Sullivan, F**. (1998). *Leadership and Professional Development in Schools*. London. Peason Education Ltd.

Burns J M, (1978). Leadership. New York: Harper Row.

**Bush, T., & Glover, D**. (2003). *School Leadership: Concepts and Evidence*. Nottingham, NCLS.

**Caldwell, B, J., & Spinks, J, M**. (1998). *Beyond the Self-Managing School*. London Falmer Press.

**Caldwell, B, J** (2004). *Re-imagining the Self-Managing School*. London. Specialist Schools Trust.

**Carless, S. A.** (1998). Gender differences in transformational leadership: an examination of superior, leader, and subordinate perspectives. *Sex Roles: A Journal of Research*: Dec, 1998.

**Carter, S, C**. (1999. *No excuses – Seven Principals of Low-Income Schools Who Set the Standard for High Achievement*. Washington, CD: The Heritage Foundation

Catanyag, D.V. (1995) Effects of transformational leadership behaviours of public secondary principals in the national capital region on school effectiveness. Unpublished doctoral dissertation. University of the Philippines, Manilla.

**Cawelti, G**. (1999) Portraits of six benchmark schools; diverse approaches to improving student performance (New York, Education Research Service)

**Chemers, M**. (2001), "Leadership effectiveness: an integrative view", in Hogg, M. and Tindale, S. (Eds), *Blackwell Handbook of Social Psychology: Group Processes*, Blackwell Publishers, Malden, MA, pp. 377-99.

**Cohen, L, Manion, L & Morrision, K** (2000). *Research Methods in Education*. 5<sup>th</sup> Ed, London. Routledge-Farmer

**Coleman, M. & Briggs, A R J**. (2007). *Research Methods in Educational Leadership and Management,* 2<sup>nd</sup> Ed. London. Sage.

**Collarbone**, **P**. (2001). *Leadership programme for serving headteachers: a review*. Nottingham. NCSL.

Collins, J. (2006). Good to Great and the Social Sectors. London, Random House.

Collins, J. C., and Porras, J. I., (1994). Built to Last: Successful Habits of Visionary Companies. New York. Harper Business.

**Conger, J.** (1989). The Charismatic Leader. Behind the Mystique of Exceptional Leadership, Jossey Bass, San Francisco.

**Conger, J. and Kanungo, R.N** (1998). *Charismatic Leadership in Organizations*. Thousand Oaks, CA. Sage.

**Conger, J. A., & Kanungo, R. N**. (1987). Toward a behavioral theory of charismatic leadership in organizational settings. *Academy of Management Review, 12*: pp. 637-647.

Conoley, J.C. & Impara, J.C. (Eds) (1995). 12th Mental Measurements Yearbook (Lincoln, NA: University of Nebraska Press).

Cortina, J. M (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology*, 78, pp. 98-104

**Covey, S.**, (1990). *The Seven Habits of Highly Effective People.* London: Simon & Schuster.

**Crawford. M**., (2003). Challenging Circumstances: The Role of Distributed and Intensified Leadership, in Bennett, N., and Anderson, L. Eds. (2003) *Rethinking Educational Leadership*. Sage. London

Crippen, C. (2005). The Democratic School: First to serve, then to lead. *Canadian Journal of Educational Administration and Policy. Issue 47*. Dec 2005. CJEAP.

**Cronbach**, **L.J**. (1951) Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, pp. 297-334.

**Crow,G.,** (2001) School leader preparation: a short review of the knowledge base. Nottingham, NCSL.

**Day, C., Harris, A., & Hadfield, M.** (2001). Challenging the orthodoxy of effective school leadership. *International Journal of Leadership in Education*, 4 (1), pp. 39 – 56.

Day, C., Harris, A., Hadfield, M., Tolley, H. & Beresford, J. (2000) Leading Schools in Times of Change. Buckingham. Open University.

**Department for Education and Employment (DfEE)** (1998). *Leadership programme for serving headteachers: handbook for trainers.* DfEE. London.

**DFES** (2002) Education and Skills: Investment for Reform. DFES. London

**Drucker, P, F.** (1985). *Innovation and Entrepreneurship: Practice and Principles*. Oxford. Butterworth-Heinemann.

**Eagly, A.H., Makhijani, M.G., & Klonsky, B.G.** (1992). Gender and the evaluation of leaders: A meta-analysis. *Psychological Bulletin, 111*, pp. 3-22.

Earl, L., Fullan, M., Leithwood, K. and Watson, N. (2000). Watching and Learning OISE/UT Evaluation of the Implementation of the National Literacy and Numeracy Strategies. Toronto. University of Toronto.

**Eden, D**. (1998). The paradox of school leadership. *Journal of Educational Administration 36 (3)*, pp. 249 – 261

**Edmonds, R.R**. (1979) "Effective schools for the urban poor" *Educational Leadership* 37,1, pp. 20-24

**Englefield, S**. (2001) *Leading to Success: Judging Success in Primary Schools in Challenging Contexts*. Nottingham. NCSL.

- **Eyal, O; & Kark, R.** (2004). 'How do Transformational Leaders Transform Organizations? A Study of the Relationship between Leadership and Entrepreneurship.' *Leadership and Policy in Schools, Volume 3 Issue 3* 2004 pp. 211 235
- **Ferguson, N., Earley, P., Fidler, B. and Ouston, J.** (2000) . *Improving Schools and Inspection: The Self-Inspecting School*. London. Paul Chapman Publishing.
- **Fink, D.** ((2005). *Leadership for Mortals: Developing and sustaining leaders of learning.* London. Chapman.
- **Ford, M.E**. (1992). Motivating Humans: Goals, Emotions, and Personal Agency Beliefs. Sage. Newbury Park, CA,
- **Fullan, M G**, (2005). *Leadership and Sustainability System Thinkers in Action*. Thousand Oaks. Sage
- **Fullan, M G,** (2003). *The Moral Imperative of School Leadership*. Thousand Oaks. Sage
- **Fullan, M G**, (2001). *The New Meaning of Educational Change*. London. Routledge Falmer
- **Fullan, M G,. & Hargreaves, A** (1998). What's Worth Fighting for in Education. Buckingham. Open University Press.
- **Gasper, J. M**. (1992). *Transformational Leadership. An integrative review of the literature*. Unpublished doctoral thesis. Western Michigan University. Kalamazoo
- Geijsel, F., Sleegers, P., Krueger, M. & van Veen, K (2003). *Understanding school improvement: Relating Capacity to Change to Changed Teacher Practice*. Paper presented at the American Educational Research Association, Chicago.
- **Geijsel, F., Sleegers, P., Van den Berg, R**. (1999), "Transformational leadership and the implementation of large-scale innovation programs", *Journal of Educational Administration*, Vol. 37 No.4, pp. 309-28.
- **Giddens, A**. (1976) New Rules of Sociological Method: A Positive Critic of Interpretative Sociologies. London. Hutchinson.
- Glickman, C. D. (2003). Holding sacred ground: Essays on leadership, courage, and endurance in our schools. San Francisco: Jossey-Bass.
- **Goddard, R; Hoy, W; Hoy A**. (2000). Collective teacher efficacy: Its meaning, measure and impact on student achievement. *American Educational Research Journal*, 37 (2), pp. 479-507.
- **Grayson, D**. (2004) Some myths and legends in quantitative psychology. *Understanding Statistics*, 3 (1), pp. 101-134.

**Greenfield, W.D.** (1991). *Toward a Theory of School Leadership*. Paper presented at the annual meeting of the American Education Research Association, Chicago, IL, April 3-7, 1991.

Gray, J., Hopkins, D., Reynolds, D., Wilcox, D., Farrell, S. and Jesson, D. (1999). *Improving Schools: Performance and Potential*. Buckingham. Open University Press.

Grint, K. (2000). The Art of Leadership Oxford. Oxford University Press.

Gronn, P. (1999). The Making of Educational Leaders. Cassell. London

**Gronn, P**. (1995). Greatness re-visited: The current obsession with transformational leadership, *Leading & Managing*, *I*(*I*), pp. 14-27.

Hall, V. and Southworth, G. (1997). Headship, School Leadership and Management, 17 (2), 151-170

**Hallinger, P.**, (2003). Leading Educational Change:reflections on the practice of instructional and transformational leadership. *Cambridge Journal of Education, Nov 2003, Vol. 33 Issue 3*, p329

**Hallinger, P. & Heck, R**. (1998). Can leadership enhance school effectiveness? 3<sup>rd</sup> Annual Seminar, Economic and Social Research Council, Redefining School Management. Milton Keynes

**Hallinger, P. & Leithwood K**.(1998). Unseen Forces: The Impact of Social Culture on School Leadership. *Peabody Journal of Education*. *73 (2)*, pp. 126-151. Lawrence Erlbaum Associates.

Hammersley, M. (1992). What's Wrong with Ethnography?. London. Routledge

**Hammersley, M. (1987).** Some notes on the terms 'validity' and 'reliability. *British Educational Research Journal*, 13(1), pp. 73-81.

**Handy, C**,.(1984). *Taken for Granted? Understanding Schools as Organisations*. York. Longmans

**Hannay, L. M., Smeltzer Erb C., and Ross, J. A.** (2001). 'Building capacity within Secondary Schools through Goal-Driven and Living Organisations'. *School Leadership & Management* Vol. 21 No. 3 pp. 271-287.

**Hargreaves, A**, (2003). Teaching in the Knowledge Society: Education in the Age of Insecurity. Buckingham. Open University Press.

**Hargreaves, D, & Hopkins, D.** (1991). *The Empowered School. The Management and Practice of Development Planning.* London. Cassell.

**Harris, A**. (2004). Distributed leadership and school improvement. *Educational Management Administration & Leadership*, 32, pp. 11 – 24.

Harris, A. & Chapman, C. (2002). Effective Leadership in Schools Facing Challenging Circumstances. Nottingham. NCSL.

**Hay Group** (2000). *Raising Achievement in Our Schools – Models for Excellence*. Nottingham. NCSL.

**Heck, R.H. and Marcoulides, G.A**. (1996). School Culture and Performance: Testing the invariance of an organisational model. *School Effectiveness and School Improvement*. *7*(1), pp. 76-95.

**HMI.** (2003). The Annual Report of Her Majesty's Chief Inspector to Schools 2002/03. London. HMSO.

Hopkins, D. (2007). Every School a Great School. London. Open University Press.

**Hopkins, D**. (2001). Instructional leadership and school improvement. NCSL Leadership Evidence Base. www.ncsl.org.uk/index.cfm?pageid=ev\_auth\_hopkins

**House, R.J.** (1971). A path-goal theory of leader effectiveness. *Administrative Science Quarterly, 16,* pp. 321-339.

**Howell, J. M** (1997). Organisation contexts: charismatic and exchange leadership. *KLSP: Transformational Leadership: Working Papers*. College Park, MD. Academy of Leadership Press.

**Ions, E** (1977). Against Behaviouralism: A Critic of Behavioural Science. Oxford. Blackwell.

**Jackson**, **D**. (2000). 'The School Improvement Journey: perspectives on leadership'. *School Leadership & Management* Vol. 20 No. 1 pp. 61-78.

**Jackson, R.M. & Rothney J.W.M.** (1961). A comparative study of the mailed questionnaire and the interview in follow-up studies. *Personnel and Guidance Journal*, 39 pp. 569 - 571.

**Johnson**, **D**. (1994) *Research Methods in Educational Management*. London. Pitman.

**Judge, T.A, & Picolo, R. G**. (2004) Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology, 89*, pp. 755 - 768.

**Kerlinger, F.N**. (1970) Foundations of Behavioural Research. New York. Rinehart & Winston

**Keys W., Sharp, C., Greene, K. and Grayson, H**. (2003). Successful Leadership of Schools in Urban and Challenging Contexts: a Review of the Literature. Nottingham: NCSL.

**Lakomski, G**. (1999). Against leadership: a concept without a cause, in Begley, P. & Leonard, P. (Eds) *The values of educational administration*. London. Falmer Press.

**Lakomski**, G. (1995) Leading and learning: From transformational leadership to organisational learning, *Leading & Managing*, *1*(3), pp. 211-225.

**Lam, Y.L. Jack.** (2002) Defining the Effects of Transformational Leadership on Organisational Learning: a cross-cultural comparison. *School Leadership & Management, Nov 2002, Vol. 22 Issue 4*, pp. 439 – 453.

**Lambert**, L. (2002). A framework for shared leadership. *Educational Leadership*. *59* (8), pp. 37-40.

**Lehner, P. N**. (1979). *Handbook of ethological methods*. New York: Garland, STPM Press.

**Leithwood, K. and Jantzi, D**. (2005) A Review of Transformational School Leadership Research 1996 – 2005. *Leadership and Policy in Schools 4:* pp. 177 –199. Routledge.

**Leithwood, K**,. (2004). Transformational School Leadership in a Transactional Policy World. Eddins, B (ed) *Building Leadership Capacity in Schools*. Thousand Oaks, CA, Corwin Press.

**Leithwood, K. Jantzi, D,. Earl, L,. Watson, N,.Levin, B, Fullan, M** (2004). Strategic leadership for large-scale reform: the case of England's national literacy and numeracy strategy. *School Leadership & Management, Feb2004, Vol. 24 Issue.* 

**Leithwood, K. and Jantzi, D**. (2000) Principal and Teacher Leadership Effects: a replication. *School Leadership & Management, Nov2000, Vol. 20 Issue 4, p415*, 20p.

**Leithwood, K., Jantzi, D., & Steinbach, R.** (1999a) *Changing Leadership for Changing Times*. Buckingham. Open University Press.

**Leithwood, K. and Jantzi, D**. (1999b) Transformational School leadership Effects: A Replication. *School Effectiveness and School Improvement, 1999, Vol 10, No 4*, pp. 451 – 479.

**Leithwood, K., & Jantzi, D.** (1996). Toward an explanation of variation in teachers' perceptions of transformational school leadership. *Educational Administration Quarterly, Oct96, Vol. 32 Issue 4*, pp. 512 - 539.

**Licata, J and Harper, G.** (2001). Organisational health and robust school vision. *Education Administration Quarterly, Vol* 37, pp. 5 -26.

**Locke, E., & Latham, G.,** (1990). A Theory of Goal Setting and Task Performance. Englewood Cliffs, NJ. Prentice Hall.

**Louis, K.S, & Marks, E.M**. (1998). Predictors of achievement in basic skills: A Canadian effective schools study. *Canadian Journal of Education, 23 (3)*, pp. 281-301.

**Lowe, K. B, Kroek, K.G, Sivasubramaniam, N.** (1996). Effectiveness Correlates of Transformational Leadership: A Meta-Analystic Review of the MLQ Literature. *Leadership Quarterly, 7(3)* pp. 385 - 425.

**Macbeath, J. (Project Director).** (2006). Responding to Challenging Circumstances: Evaluation of the 'Schools Facing Exceptionally Challenging Circumstances' Project. DFES, University of Cambridge.

MacGilchrist B, Myers K, Reed, J. (2004). The Intelligent School. London. Sage.

Male, T. (2006). Being an Effective Headteacher. London. Sage.

Mangione, T. W. (1995). Mail Surveys: Improving the Quality. Thousand Oaks. Sage.

Marks, H., Printy, S., (2003). Principal Leadership and School Performance: An Integration of Transformational and Instructional Leadership, in *Educational Administration Quarterly, Aug 2003, Vol. 39 Issue 3*, p. 370.

**Marks, H., Louis, K.S, & Printy, S** (2000). The capacity for organisational learning'. *Educational Administration Quarterly, Vol 35, No 5* pp. 707 – 50.

**McMahon** A (2003). Fair Furlong Primary School: five years on. In M Maden (Ed) *Success against the odds; five yeas on.* London. Routledge Falmer.

**Maslow, A.,** (1970). *Motivation and Personality, 2<sup>nd</sup> Ed.* New York. Harper & Row.

Miles, M. & Huberman, A. (1994). Qualitative Data Analysis. London Sage.

**Mitchell, D,. Tucker, S**. (1992). Leadership as a Way of Thinking. *Educational Leadership 49, 5* (February 1992) pp. 10-11.

**Morrison, M.** (2002). What do we mean by educational research? in Coleman, M & Briggs, R, J. *Research Methods in Educational Leadership and Management*. London. Sage.

**Mortimore**, **P**. (1991). The nature and findings of school effectiveness research in the primary sector. Riddell, S. and Brown, S. (Eds). *School Effectiveness Research*. *Its Messages for school Improvement*. London. HMSO.

**Mouly, G.J.** (1978). Educational Research; The Art and Science of Investigation. Boston. Allyn and Bacon

Muijs, D; Harris, A; Chapman. C; Stoll. L. and Russ. J. (2004). Improving Schools in Socially Disadvantaged Areas: A Review of the Literature. *International Journal of School Effectiveness and School Improvement15.2*.

**Mulford, B**. (2006). *Leadership for School and Student Learning – What Do We Know?* BC Educational Leadership Research. April 2006.

**Mulford, B. & Silins, H.** (2003). Leadership for organisational learning and improved student outcomes - What do we know?. *Cambridge Journal of Education 33* (2), pp. 175-195.

**Myers, K** (1995). School Improvement in Practice: The schools make a difference project. London. Falmer Press.

Nanus, B. (1992). Visionary Leadership. San Francisco: Jossey Bass, Inc.

NCSL. (2004). Standards for Headteachers. (October 2004) Nottingham. NCSL.

Novak, J, M. (2002) *Inviting Educational Leadership*. London. Pearson.

Ofsted (2001) Leadership in Schools. London. NCSL.

**Ofsted** (1999) *The National Literacy Strategy: an interim evaluation*. London. Ofsted.

**Oppenheim, A,N**. (1992). *Questionnaire Design, Interviewing and Attitude Measurement*. London. Continuum.

**Papalewis**, **R**. (1988). A case study in organizational culture: Administrator's shared values, perceptions, and beliefs. *Planning and Change*, *19(3)*, pp. 158-165.

**Pawar, B. & Eastman, K**. (1997). The nature and implications of contextual influences on transformational leadership. *Academy of Management Review, Vol* 22, pp. 80-109.

**Phillips, E, M. & Pugh, D, S**. (1994). *How to get a PhD*. Open University. Buckingham

**Podsakoff, P.M., MacKenzie, S.B., Moorman, R.H. & Fetter, R**. (1990). Transformational leader behaviours and their effects on followers' trust in leader, satisfaction, and organisational citizenship behaviours. *The Leadership Quarterly, 1* p107-142.

**Poplin, M**., (1992). The leader's new role: Looking to the growth of teachers. *Educational Leadership; Feb92, Vol. 49 Issue 5*, pp. 10 - 12

**Potter, D & Reynolds, D** (2002) School improvement for schools facing challenging circumstances: a review of the reseach and practice, *School Leadership and Management, 22 (3)* pp. 243 – 256.

**Rafferty, A.E. and Griffin, M.A**. (2004) Dimensions of Transformational Leadership: Conceptual and Empirical Extensions. *The Leadership Quarterly, 15* pp. 329-354.

**Reynolds, D, Potter, D and Chapman, C** (2003). A Review of Research and Practice. In Davies, B. and West-Burnham, J. (eds.) *Handbook for Educational Leadership and Management* London: Pearson.

**Reynolds, D., Hopkins, D., Potter, D and Chapman, C** (2001). School Improvement for Schools Facing Challenging Circumstances. A Review of the Research and Practice. London. DFES.

**Rose, D. and Sullivan, O**. (1996). *Introducing Data Analysis for Social Scientists* (2<sup>nd</sup> Ed). Buckingham. Open University Press.

Ross, J; Hogaboam-Gray, A; & Gray, P. (2004). Prior Student Achievement, Collaborative School Processes and Collective Teacher Efficacy. *Leadership and Policy in Schools*, 2004, Vol 3, No. 3, pp. 163 – 188.

**Rutter, M**. (1979). *15000 Hours: secondary schools and their effects on children*. London: Open Books.

**Sagor, R**. (1992) Three principals who make a difference. *Educational Leadership*; *Feb 92, Vol. 49 Issue 5*, pp. 13 – 19.

Sainsbury, M., Schagan, I., Whetton, C. with Hagues, N. and Minnis, M. (1998) Evaluation of the National Literacy Project: Cohort 1, 1996-1998. Slough. NFER.

**Salinus, H, & Mulford, B** (2002) Leadership and School Results. In Leithwood, K., Hallinger, P., Seashore-Louis, K., Furman-Brown, G., Gronn, P., Mulford, W and Riley, K (eds). *Second International Handbook of Educational Leadership and Administration*. Dordrecht. Kluwer.

**Sammons, P., Hillman, J., and Mortimore, P.,** (1995). Key Characteristics of Effective Schools: A Review of School Effectiveness Research. London. OFSTED.

**Schein, E H**. (1985). *Organisational Culture and Leadership* San Francisco. Jossey-Bass.

**Scoolis, J.** (1998). What is vision and how do you get one?, *Thrust for Educational Leadership, 10552243, Nov/Dec98, Vol. 28, Issue 2.* 

**Senge, P. M**. (1990). *The Fifth Discipline. The art and practice of the learning organization*. London. Random House.

**Sergiovanni, T,.** (1995). *The Headteachership: A Reflective Practice Perspective*. Boston. Allyn and Bacon.

Sergiovanni, T,. (1994). Building Communities in School,. Thousand Oaks, Sage.

**Sergiovanni, T**,. (1992) *Moral Leadership: Getting to the Heart of School Improvement*. Thousand Oaks, Sage.

**Sergiovanni, T.** (1990), Value Added Leadership: How to Get Extraordinary Performance in Schools, Harcourt Brace and Jovanich, San Diego, CA.

**Seltzer,J. and Bass, B, M**. (1990). Transformational Leadership: Beyond initiation and consideration. *Journal of Management, 16,* pp. 693-703.

**Shamir, B. and Howell, J.M**. (1999). Organisational and contextual influences on the emergence and effectiveness of charismatic leadership. *Leadership Quarterly, Vol 10 No2*, pp. 257 – 83.

**Sheppard, B**, (1996). Exploring the transformational nature of instructional leadership. Alberta. *Journal of Educational Research, XLII(4)*, pp. 325–44.

**Southworth, G.** (2002). Instructional Leadership in Schools: Reflections and empirical evidence. *School Leadership and Management 22(1)*, pp. 73 – 91.

**Southworth, G.** (2001). *Leading Learning and Teaching in Primary Schools*. NCSL. Nottingham.

**Southworth, G.** (1999). Primary school leadership in England: Policy practice and theory. *School Leadership & Management, 19 (1)*, pp. 49 – 65.

**Southworth, G. & Weindling, D**. (2002). *Leadership in Large Primary Schools* NCSL. Nottingham.

**Stacey**, **R**. (1992). Managing Chaos: Dynamic Business Strategies in an Unpredictable World. London. Kogan Page.

**Stevenson, E,J & Warne, J, R**. (2002). Effective Leadership Development: creating better mental models. School of Economics and Management, University College. Australian Defence Force Academy.

**Stoll, L. & Fink, D.** (1996). *Changing Our Schools: Linking School Effectiveness and School Improvement.* Buckingham. Open University.

**Stoll, L. & Myers, K. (Eds).** (1998). *No Quick Fixes – Perspectives on Schools in Difficulty.* London. Falmer Press.

**Stolp, S. & Smith, S.** (1995). *Transforming School Culture*. ERIC Clearinghouse on Education Management, Oregon.

**Storey, A.** (2004). The problem of distributed leadership in schools. *School Leadership and Management, Vol 24 (3).* 

**Strauss, A. & Corbin, J.** (1990). *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*. Newbury Park, CA: Sage.

**Taylor-Moore, P.** (2004). Leadership on the Frontline: Thriving and surviving in challenging circumstances. Nottingham. NCSL.

Wang, M., Haertel, G & Walberg, H. (1993). Towards a knowledge base for school learning. *Review of Educational Research*, 63 (3), pp. 249-94.

 $Leading \ the \ Teaching \ and \ Learning \ -A \ Study \ of \ transformational \ leadership \ in \ secondary \ schools \ facing \ challenging \ circumstances \ -Graham \ Wright$ 

**Weber, M**., (1947). *The Theory of Social and Economic Organisation*. New York. Free Press.

**Weick, K.E**. (2001). Leadership as the Legitimation of Doubt. In W. Bennis, G.M. Spreitzer & T.G. Cummings (Eds.) *The Future of Leadership*. San Francisco. Jossey-Bass.

West, M., Ainscow, M. & Stanford, J. (2005). Sustaining improvement in schools in challenging circumstances; a study of successful practice. *School Leadership and Management.* (25) No 1. 2005.

Winter, G. (2000). A comparative discussion of the notion of 'validity' in qualitative and quantitative research. *The Qualitative Report* 4(3/4).

**Yukl, G.A.** (2002). A hierarchical taxonomy of leadership behavior: integrating a half century of behavior research. *Journal of Leadership & Organizational Studies*. June 2002.

Yukl, G.A. (2001). Leadership in Organisations. 5th Ed. Prentice-Hall, New Jersey.

# Leading the Teaching and Learning - A study of transformational leadership in secondary schools facing challenging circumstances.

#### **CHAPTER 8 - APPENDICES**

#### Content

- A) Pen portraits of the schools participating in the research.
- B) Reliability Cronbach's Alpha
- C) (US) Descriptive Statistics for MLQ 5X 2004 Normative Sample
- D) Descriptive Statistics Statement Variables
- E) Frequency Tables and Chi-square Tests
- F) License Agreement Mind Garden Inc.

#### **Appendices A - Pen Portraits of the Participating Schools.**

#### School AA.

The school's 2006 GCSE results (5 A\*-C including Maths and English) placed it in the bottom 150 all of school's nationally, however its value added showing the progress the students have made from the age of 11 until 16 relative to prior attainment in 2006 is close to the national average. Their 2006 OFSTED report comments that:-

'around 40% of the students living in areas that have very high levels of social and economic deprivation..' (Page 1)

In terms of leadership and management, the OFSTED reports judges that

'the overall quality of leadership and management is satisfactory with some good features. The headteacher has been the key driving force in moving the school forward and has displayed very good leadership qualities'. (p 9)

#### School BB.

The school's GCSE results for 2006 were the worst in a large local authority (DFES Performance Tables, 2006). However, their value added comparator (2006) shows that the students are making above average progress. The 2005 OSTED report comments that:-

'it serves a community where there is significant social and economic hardship and the proportion of students entitled to a free school meal is above average'. (p 1)

The OFSTED judgement on leadership and management was that it was satisfactory overall.

'The leadership provided by the headteacher and senior managers is good; it is well founded on a clear and ambitious vision for the school and its further improvement' (p 5)

#### School CC

This project school is one of the worst performers in terms of GCSE 5 A\*-Cs in the country in 2006 (Bottom 40 -DFES Performance Tables, 2006). However, it also demonstrates above national averages in terms of the value added between the ages of 11 and 16. The 2006 OFSTED report comments that

'Twice the average number of pupils are entitled to free school meals and there is a higher than average number of pupils with learning difficulties and/or disabilities. Pupils join and leave the school during term time at a much faster rate than in most schools' (p 1)

The OFSTED report judges leadership to be good.

'Good leadership of the school has increased the capacity of management to improve provision and raise attainment....The school deals with challenging circumstances, but does not intend that to limit what pupils can do'. (p 3)

#### School DD

This is the only project school in which attainment standards have fallen over the past three years. Despite producing GCSE results that appear better than schools AA- CC, their 2006 value added scores rank just outside of the bottom 5% of all schools in the country (DFES Performance Tables, 2006). The 2004 OFSTED report commented that

'Pupils' socio-economic circumstances are below average with entitlement to free school meals at twice the national average' (p 1)

The current headteacher had only been in post for one term at the time of the OFSTED inspection. Nonetheless the judgement made was that :-

'leadership and management are satisfactory overall'. (p 19).

#### School EE

Unlike all the other project schools, this school is a single sex boys school. Progress for boys at GCSE lags behind girls (2006 – 5 A\*-C or higher – Boys 58%, Girls 66% - Source DFES Performance Tables 2006). The school saw a big increase in its GCSE percentages between 2002 and 2004, but they have levelled off since. The schools value added is in the bottom 5% of all schools in 2006.

The school was last inspected in 2003 when the report commented that:-

'the attainment on entry to the school in Year 7 is well below average. The school is recognised as one facing challenging circumstances.' (p 6)

The current headteacher had been in post for one year at the time of the inspection and OFSTED judged that:-

'the leadership and management of the school are good overall. The management skills of the new headteacher in identifying areas for development and improvement, and his leadership qualities in ensuring these necessary changes are undertaken are very good.' (p 27)

#### School FF.

The GCSE results have significantly improved at all levels over the last three years, although its value added is well below the national averages (DFES Performance Tables, 2006). The 2006 OFSTED Report comments that:-

'The school attracts pupils from families that span the national range of social and economic circumstances but there are far more from socially and economically challenged backgrounds than normal'. (p 3)

In terms of the leadership qualities of the school, OFSTED deemed it to be satisfactory overall

'Strong leadership by the headteacher is providing a clear vision of good attitudes, achievement and 'pride in excellence' to underpin the school's work'. (p 20)

#### School GG.

This project school has GCSE outcomes (in terms of 5 A\*-C) that are only half that of the local authority average and feature in the bottom 10% of all schools nationally (DFES Performance Tables, 2006). However, its value added from 11-16 is very good and on this rating it is placed in the top 10% of all secondary schools nationally.

The 2006 OFSTED report in describing the school commented that it is:-

'The school serves an urban area of considerable social and economic deprivation.' (p 1)

The report rated the leadership highly.

'Leadership and management are good with some outstanding aspects and are continuing to improve. The headteacher provides inspirational leadership'. (p 3)

#### School HH

Along with schools EE, FF and GG, this project school has seen a significant rise in the percentage of GCSE grades of 5A\*-Cs or higher since 2003. The 2006 value added

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statistics show that progress is in line with the national averages (DFES Performance Tables, 2006).

In 2007, OFSTED described the school as a smaller than average sized comprehensive school.

'The proportion of students who have learning difficulties and/or disabilities and those who have a statement of special educational needs exceeds the national average. (p 1)

Leadership and management of the school, including governance, are satisfactory.

'The headteacher, supported by an effective senior leadership team, is providing clear direction and priorities for the school community.' (p 3)

#### Appendices B) Reliability - Cronbach's Alpha

	Scale Mean if	Scale	Corrected	Cronbach's
	Item Deleted	Variance if	Item-Total	Alpha if Item
		Item Deleted	Correlation	Deleted
1	101.39	551.034	.552	.906
2	101.43	558.178	.467	.907
3	102.99	610.137	455	.919
4	102.05	584.257	079	.913
5	103.50	605.046	455	.917
6	101.54	558.976	.416	.908
7	103.45	592.455	249	.914
8	101.80	545.259	.662	.905
9	100.90	556.703	.540	.907
10	101.86	542.205	.609	.905
11	101.33	555.550	.492	.907
12	103.31	608.079	498	.917
13	101.27	548.415	.593	.906
14	101.48	545.977	.637	.905
15	102.33	580.840	018	.913
16	102.04	553.779	.440	.907
17	102.61	585.830	101	.914
18	101.37	545.523	.592	.906
19	101.74	540.097	.599	.905
20	103.39	601.378	378	.916
21	101.69	555.159	.415	.908
22	102.25	564.149	.253	.910
23	101.32	548.575	.646	.905
24	101.98	559.541	.348	.909
25	101.55	542.537	.691	.905
26	101.30	542.745	.742	.904
27	102.57	582.315	044	.913
28	101.95	551.854	.558	.906
29	102.16	533.064	.727	.904
30	101.98	542.198	.657	.905
31	101.98	530.637	.789	.903
32	101.93	546.960	.545	.906
33	103.24	602.566	392	.917
34	101.19	543.073	.724	.905
35	101.54	533.511	.739	.904
36	101.22	549.436	.638	.906
37	101.84	534.640	.771	.903
38	101.58	543.396	.672	.905
39	102.00	542.562	.638	.905
40	101.80	538.324	.628	.905
41	101.30	542.143	.719	.904
42	101.49	536.772	.733	.904
43	101.27	541.552	.715	.904
44	101.66	536.801	.713	.904
45	101.31	542.296	.656	.905

Appendices C - Descriptive Statistics for MLQ 5X 2004 Normative Sample

	Total Sample (n = 27 285)		Self rating (n	· · · · · · · · · · · · · · · · · · ·
Scale	Mean	SD	Mean	SD
IIA	2.94	.76	2.95	.53
IIB	2.77	.72	2.99	.59
IM	2.92	.76	3.04	.59
IS	2.78	.71	2.96	.52
IC	2.85	.78	3.16	.52
CR	2.87	.70	2.99	.53
MBEA	1.67	.88	1.58	.79
MBEP	1.03	.75	1.07	.62
LF	.65	.67	.61	.52
EE	2.74	.86	2.79	.61
EFF	3.07	.72	3.14	.51
SAT	3.08	.83	3.09	.55

IIA	Idealised Influence (Attributed)		
IIB	Idealised Influence (Behaviour)		
IM	Inspirational Motivation		
IS	Intellectual Stimulation	Free	
IC	Individual Consideration		
CR	Contingent Reward_	0.0	
MBEA Management by Exception (Active)_			
MBEP	Management by Exception (Passive)	2.0	
LF	Lassez-faire	3.0	
EE	Extra Effort	4.0	
EFF	Effectiveness		

Satisfaction

Freq	uency Key
0.0 1.0 2.0 3.0 4.0	Once in a while Not at all Sometimes Fairly often Frequently, if not always

Adapted from Avolio, B, J. & Bass, B. M (2004). *Multifactor Leadership Questionnaire*. *Manual and Sampler Set 3<sup>rd</sup> Ed*. Redwood City, CA. Mindgarden Inc, p70.

SAT

#### Appendices D - <u>Descriptive Statistics - Statement Variables</u>

#### **Descriptive Statistics (Raters only – not headteachers)**

	N	Minimum	Maximum	Mean	Std. Deviation
1 CR	184	0	4	2.84	1.151
2 IS	171	0	4	2.78	.997
3 MEP	190	0	4	1.21	1.355
4 MEA	186	0	4	2.19	1.168
5 LF	191	0	4	.76	1.154
6 IIB	192	0	4	2.66	1.114
7 LF	188	0	4	.80	.993
8 IS	186	0	4	2.44	1.148
9 IM	195	0	4	3.36	.906
10 IIA	182	0	4	2.36	1.329
11 CR	176	0	4	2.86	1.094
12 MEP	191	0	4	.85	1.114
13 IM	194	0	4	2.99	1.117
14 IIB	193	0	4	2.77	1.146
15 IC	184	0	4	1.86	1.155
16 CR	182	0	4	2.20	1.243
17 MEP	186	0	4	1.59	1.267
18 IIA	186	0	4	2.81	1.224
19 IC	191	0	4	2.53	1.406
20 MEP	185	0	4	.82	1.173
21 IIA	191	0	4	2.47	1.264
22 MEA	189	0	4	2.12	1.258
23 IIB	191	0	4	2.96	1.025
24 MEA	173	0	4	2.36	1.219
25 IIA	191	0	4	2.64	1.200
26 IM	193	0	4	2.95	1.084
27 MEA	177	0	4	1.72	1.220
28 LF	181	0	4	2.29	1.036
29 IC	184	0	4	2.01	1.355
30 IS	180	0	4	2.21	1.251
31 IC	188	0	4	2.19	1.327
32 IS	178	0	4	2.28	1.275
33 LF	188	0	4	.99	1.184
34 IIB	184	0	4	3.03	1.101
35 CR	191	0	4	2.66	1.362
36 IM	189	0	4	3.06	1.014
Valid N (listwise)	150				

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