Article

The Impact of Leadership on Student Outcomes: How Successful School Leaders Use Transformational and Instructional Strategies to Make a Difference

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Abstract

Purpose: This article illustrates how successful leaders combine the too often dichotomized practices of transformational and instructional leadership in different ways across different phases of their schools' development in order to progressively shape and "layer" the improvement culture in improving students' outcomes. **Research Methods:** Empirical data were drawn from a 3-year mixed-methods national study ("Impact Study") that investigated associations between the work of principals in effective and improving primary and secondary schools in England and student outcomes as defined (but not confined) by their national examination and assessment results over 3 years. The research began with a critical survey of the extant literature, followed by a national survey that explored principals' and key staff's perceptions of school improvement strategies and actions that they believed had helped foster better student attainment. This was complemented by multiperspective in-depth case studies of a subsample of 20 schools.

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Findings: The research provides new empirical evidence of how successful principals directly and indirectly achieve and sustain improvement over time through combining both transformational and instructional leadership strategies. The findings show that schools' abilities to improve and sustain effectiveness over the long term are not primarily the result of the principals' leadership style but of their understanding and diagnosis of the school's needs and their application of clearly articulated, organizationally shared educational values through multiple combinations and accumulations of time and context-sensitive strategies that are "layered" and progressively embedded in the school's work, culture, and achievements. **Implications:** Mixed-methods research designs are likely to provide finer grained, more nuanced evidence-based understandings of the leadership roles and behaviors of principals who achieve and sustain educational outcomes in schools than single lens quantitative analyses, meta-analyses, or purely qualitative approaches. The findings themselves provide support for more differentiated, context sensitive training and development for aspiring and serving principals.

The Research Context: Why School Leadership Matters

The past 20 years have witnessed remarkably consistent and persisting, worldwide efforts by educational policymakers to raise standards of achievement for all students through various school reforms. Common to almost all government reforms has been an increased emphasis on accountability and performativity accompanied by a concurrent movement toward the decentralization of financial management and quality control functions to schools, with increasing emphasis on evaluation and assessment (Ball, 2001, 2003; Baker & LeTendre, 2005; Organisation for Economic Co-operation and Development [OECD], 2008, 2013).

These changing policy landscapes of education have culminated in a changing profile of school leadership in many countries (OECD, 2008, 2010, 2012). However, what remains unchanged is a clear consensus in the policy and research arenas that "effective school autonomy depends on effective leaders" (OECD, 2012, p. 14). International research has provided consistent evidence that demonstrates the potential positive and negative impacts of leadership, particularly principal leadership, on school

organization, culture and conditions, and, through these, on the quality of teaching and learning and student achievement (Bruggencate, Luyten, Scheerens, & Sleegers, 2012; Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010; Day et al., 2009; Gu & Johansson, 2013; Leithwood & Jantzi, 1999; Leithwood, Jantzi, & Steinbach, 1999; Marks & Printy, 2003; Mulford, 2008; Robinson, Lloyd, & Rowe, 2008; Silins & Mulford, 2002a).

Comprehensive and large-scale systematic reviews of, by and large, quantitative data (Hallinger & Heck, 1996, 2010; Leithwood, Day, Sammons, Harris, & Hopkins, 2006; Leithwood, Day, Sammons, Hopkins, & Harris, 2008; Marzano, Waters, & McNulty, 2005; Robinson, Hohepa, & Lloyd, 2009) have also found that leadership is second only to classroom teaching as an influence on pupil learning (Leithwood et al., 2006) and that such influence is achieved through its effects on school organization and culture as well as on teacher behavior and classroom practices (Witziers, Bosker, & Krüger, 2003). Hallinger's (2010) review of 30 years of empirical research on school leadership points in particular to the indirect or mediated positive effects that leaders can have on student achievement through the building of collaborative organizational learning, structures, and cultures and the development of staff and community leadership capacities to promote teaching and learning and create a positive school climate—which in turn promote students' motivation, engagement, and achievement.

Although it is acknowledged that measurable outcomes of students' academic progress and achievement are key indicators in identifying school "effectiveness," they are insufficient to define "successful" schools. A range of leadership research conducted in many contexts over the past two decades shows clearly that "successful" schools strive to educate their pupils by promoting positive values (integrity, compassion, fairness, and love of lifelong learning), as well as fostering citizenship and personal, economic, and social capabilities (Day & Leithwood, 2007; Ishimaru, 2013; Mulford & Silins, 2011; Putnam, 2002). These social outcomes are likely to be deemed by successful leaders to be as important as fostering students' academic outcomes. Studies carried out by members of the 20-country International Successful School Principals Project over the past decade provide rich empirical evidence that leadership values, qualities, and strategies are critical factors in explaining variation in pupil outcomes between schools (Day & Leithwood, 2007; Moos, Johannson, & Day, 2012; Ylimaki & Jacobson, 2011). A U.S. study (Louis, Leithwood, Wahlstrom, & Anderson, 2010) that investigated the links between school leadership and student learning in 180 schools in 43 school districts in North America, further confirms that leadership, particularly that of the principal, counts.

> Most school variables, considered separately, have only small effects on student learning. To obtain large effects, educators need to create synergy across the relevant variables. Among all the parents, teachers and policy makers who work hard to improve education, educators in leadership positions are uniquely well positioned to ensure the necessary synergy. (Louis et al., 2010, p. 9)

Thus, "effectiveness" as defined solely in terms of academic progress and measurable attainment, is a necessary, but not sufficient, indicator of "success" in terms of students' broader educational progress and attainment. In this article, while schools were selected initially on the basis of their academic effectiveness over time, the case studies showed clearly that their principals defined success in broader terms.

Despite the consensus on the important influence of school leaders on student outcomes, the ways in which leadership effects have been analyzed vary considerably, depending on the variables and research designs adopted by researchers to study the nature and significance of particular aspects of school leadership in improving student outcomes. The most commonly researched leadership models that have been identified as resulting in success are "instructional" and "transformational." While transformational leadership has traditionally emphasized vision and inspiration, focusing on establishing structures and cultures that enhance the quality of teaching and learning, setting directions, developing people, and (re)designing the organization, instructional leadership is said to emphasize above all else the importance of establishing clear educational goals, planning the curriculum, and evaluating teachers and teaching. It sees the leaders' prime focus as responsibility for promoting better measurable outcomes for students, emphasizing the importance of enhancing the quality of classroom teaching and learning.

The results of Robinson et al.'s (2009) meta-analysis of quantitative empirical studies suggested that transformational leadership is less likely to result in strong effects on pupil outcomes (because it focused originally on staff relationships) than instructional leadership, which is focused on the core business of schools in enhancing effective teaching and learning. This, however, appears to be at variance with empirical evidence from Marks and Printy's (2003) earlier research that claimed that concentrated instructional leadership had rather limited value and impact if leaders were to effectively respond only to the undeniably strong, policy-driven external demands of accountability, performativity, and change: "Responding to these demands with an outmoded conception of instructional leadership was senseless, but engaging teachers in a collaborative dialogue about these issues and their implications for teaching and learning was essential" (p. 392). They concluded that "when transformational and shared instructional leadership

coexist in an integrated form of leadership, the influence on school performance, measured by the quality of its pedagogy and the achievement of its students, is substantial" (p. 370). In a meta-analysis of unpublished research studies about the nature of transformational leadership and its impact on school organization, teachers, and students, Leithwood and Sun (2012) reached a similar conclusion. They found that "each transformational school leadership practice adds to the status of consequential school conditions." Effective leadership, especially in today's performance driven culture, thus includes both a focus on the internal states of organizational members that are critical to their performance and classroom instruction.

Evidence from the empirical research reported in this article supports and extends Marks and Printy's (2003) conclusions, those of other later work on integrated leadership (Printy, Marks, & Bowers, 2009), and the conclusions of Leithwood and Sun (2012). It shows that the overrigid distinction between transformational leadership and instructional leadership made by Robinson et al. (2009), and indeed their claims that instructional leadership has greater effects on students than transformational leadership, did not apply to the leadership approaches in a sample of more than 600 (primary $n = 363$ and secondary $n = 309$) of the most effective and improved schools in England (Day et al., 2011). Our data showed that, on the contrary, in schools that sustained and/or improved their performance as judged by student academic outcomes and external inspection results, principals had exercised leadership that was both transformational and instructional as they progressively shaped the culture and work of their schools in building teachers' commitment and capacities during different phases of their schools' development journeys. Through this integrated approach, changes had been introduced and implemented successfully and standards of teaching and learning built and sustained. These findings provide empirical support to Leithwood and Sun's (2012) claim that "improvement requires leaders to enact a wide range of practices" (Leithwood & Sun, 2012, p. 403). They also go beyond their claim by providing a "practice-specific" conceptualization of what we call "successful" school leadership that is expressed through the application and accumulation of combinations of values-informed organizational, personal, and task-centered strategies and actions, which, according to the data in our research, together contributed to successful student outcomes. We identified these leadership approaches as the "layering" (Day et al., 2011) of "fit-for-purpose" combinations and accumulations of within-phase leadership strategies and actions over time through the enactment of principals' personal and professional values and visions and in response to careful diagnosis and multiple and sometimes conflicting communities of interest.

This understanding of successful leadership values and practices is distinctively different from, for example, "contingency" leadership theory (Fiedler, 1964). This theory proposed that decisions by the leader were made solely in response to the interaction between environmental uncertainty, organizational structure and aspects of "performance" (Pennings, 1975). It is different, also, from "situational" leadership theory (Hersey & Blanchard, 1988) in which, similar to "contingency" leadership, the fundamental principle is that there is no single "best" approach to leadership because leaders who are successful respond according to their judgments of the perceived "maturity" of the individual or group that they are trying to influence. Neither theory was generated from research in school contexts. Moreover, neither appears to acknowledge the complex range and combinations of strategies, actions, and behaviors that successful principals employ over time in striving to improve their schools. Both, also, seem to ignore the active role played by values—moral and ethical purposes—in decisions about which strategies to apply, how they should be combined, applied, and changed over time and how, cumulatively, these might best lead to the building of organizational cultures and actions by all stakeholders through which improvements may be more likely to occur. Hersey and Blanchard's (1988) model, for example, seems to ignore participation in leadership by others in its identification and application of four leadership behavior "types" (telling, selling, participating, and delegating) that leaders use according to their identification of four levels of organizational maturity (very capable and confident, capable but unwilling, unable but willing, unable and insecure). These models were important in their time and contributed significantly to knowledge of leadership, though there were criticisms (see, e.g., Goodson, McGee, & Cashman, 1989; Graeff, 1997; Thompson & Vecchio, 2009). Much research since then, however, has been able to find more complex relationships between, for example, values, behaviors, and strategies used in effective and improving schools that serve different contexts to a range of communities.

By "layering," we are referring to the ways in which, within and across different phases of their schools' improvement journeys, the principals selected, clustered, integrated, and placed different emphases on different combinations of both transformational and instructional strategies that were timely and fit for purpose. In this way, as findings of our 20 case studies show, the principals progressively built the individual and collective capacity and commitment of staff, students, and community. Quantitative results complemented these case study findings by providing empirical evidence of the patterns of associations between certain key features of leadership identified from confirmatory factor analysis (CFA) of survey responses by principals

(setting directions, redesigning the organization, developing people, and managing teaching and learning, trust) and the role of personal qualities. The results revealed the interconnections of how such leadership strategies and actions shaped school and classroom processes and improved school conditions that, in turn, promoted better pupil outcomes (Sammons, Davies, Day, & Gu, 2014; Sammons, Gu, Day, & Ko, 2011).

The IMPACT Research: Mixed Methods Design

Figure 1 illustrates the different phases and strands of the IMPACT (Impact of School Leadership on Pupil Outcomes) research and their sequencing. A review of the leadership literature (Leithwood et al., 2006) informed the design and development of the questionnaire surveys and the case study interviews. The use of mixed methods increased the possibilities of identifying various patterns of association and possible causal connections between variation in different indicators of school performance and measures of school processes and the way these are linked with different features of leadership practices and pupil outcomes. The sequencing of the study facilitated the ongoing integration of evidence, synthesis, and meta-inferences necessary in well-designed mixed methods research (Day et al., 2008; Sammons, 2010; Sammons et al., 2014).
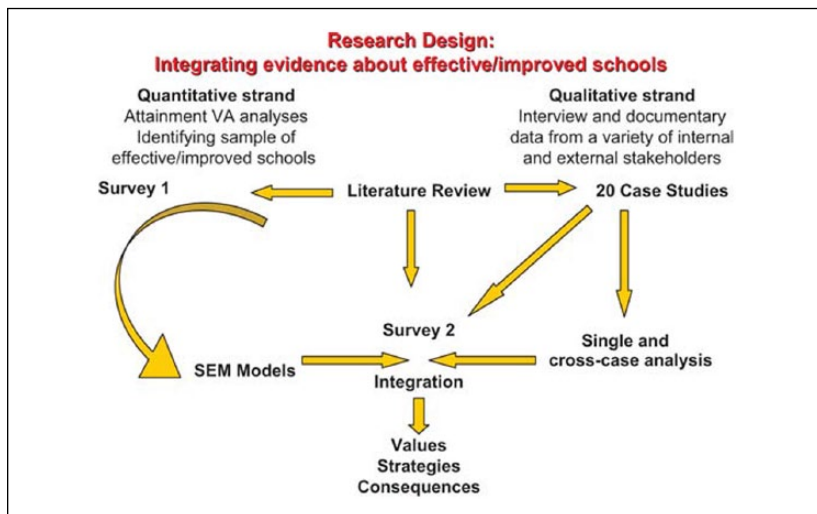

Figure 1. Research design: Integrating evidence about effective/improved schools.

The Sampling Strategy: Identifying Effective and Improved Schools

An analysis of national assessment and examination data sets on primary and secondary school performance was used to identify schools that were effective in their value-added results (which take account of pupils' prior attainment and background characteristics) and also showed significant improvement in raw results or stable high attainment over at least the previous three consecutive years under the leadership of the same principal. The analyses were based on relevant published data and key indicators, including both "value-added" measures of pupil progress based on multilevel statistical analyses, combined with important accountability indicators such as the percentage of pupils achieving national performance benchmarks in Key Stage 2 assessments (Age 11), or at Key Stage 4 in public GCSE examinations (Age 16). Approximately a third of the primary (34%) and of the secondary (37%) schools in England for which national data were available were classified as meeting our criteria as more effective/improved in terms of value-added performance and changes in pupil attainment over a course of 3 years.

Nationally, a greater proportion of English schools are in Free School Meal (FSM) Band 1 (0% to 8% pupils eligible for FSM) and Band 2 (9% to 20% eligible) than in the more disadvantaged groups of FSM Band 3 (21% to 35% eligible) and Band 4 (36%+ eligible), and this is the case for both primary and secondary schools. We deliberately oversampled schools with higher proportions of disadvantaged pupils (FSM Bands 3 and 4) to achieve a more balanced (less skewed toward low disadvantage) sample of schools in relation to level of disadvantaged pupil intake. In addition, pupils in schools from more disadvantaged areas tend to start from a lower attainment level, and thus, such a sample allowed us to (a) secure a group of schools that had seen pupil progress and attainment improve significantly from low to moderate or high and (b) explore in greater depth the impact of leadership on the improvement of pupil outcomes in schools serving more disadvantaged intakes. Table 1 indicates the composition of this stratified random sample of schools by FSM bands against the national distribution of schools.

Two Questionnaire Surveys to Investigate Leadership and School Process

The first questionnaire survey was conducted for principals and key staff (two per school at primary level, five per school at secondary level) among the sample schools. The survey design was informed by a review of the literature on the impact of school leadership on pupil outcomes (Leithwood et al., 2006) and covered the following topics:

Table 1. Distribution of Sample Schools by Socioeconomic Contexts.

	Primary Sample		Primary National		Secondary Sample		Secondary National	
FSM Band	N	%	N	%	N	%	N	%
FSM1 (0% to 8%)	510	33	6,150	42	400	35	1,159	37
FSM2 (9% to 20%)	452	29	2,896	27	393	34	1,097	35
FSM3 (21% to 35%)	275	18	2,359	16	191	17	520	17
FSM4 (36%+)	312	20	2,267	15	156	14	339	11
Total	1,549	100	14,672	100	1,140	100	3,115	100

Note. FSM = free school meal.

1. Leadership Practice
2. Leaders' Internal States
3. Leadership Distribution
4. Leadership Influence
5. School Conditions
6. Classroom Conditions

The questionnaire included specific items that focused on key aspects of transformational leadership strategies (e.g., setting directions and visions) and instructional leadership strategies (e.g., managing teaching and learning) and items that explored principals' and key staff's perceptions of change in these six areas of school work and on academic and other kinds of pupil outcomes (nonacademic areas such as engagement, motivation, behavior, and attendance) over the previous 3 years. This period coincided with the years over which the analyses of national pupil attainment data had taken place. The key staff survey closely mirrored that of the principals so that comparisons could be made between responses by the two groups. The response rate (Table 2) was somewhat higher for principals of secondary schools, which were followed up in more detail to ensure roughly equal numbers of responses from schools in each sector. Although not high, the response rate is typical of that achieved by surveys of schools in England in recent years.

Case Studies of 20 Primary and Secondary Schools

The qualitative strand used 20 in-depth case studies of a subset of these schools. Data were collected through three visits each year ($N = 6$) over 2 years with detailed interviews of principals and a range of key staff and stakeholders.[1] These case studies represented schools in different sectors and

Table 2. Wave 1 Survey Response Rate.

	Sample Size Surveyed (*n*)	Questionnaires Returned (*n*)	Response Rate (%)
Heads			
Primary	1,550	378[a]	24
Secondary	1,140	362[a]	32
Key staff[b] at school level			
Primary	1,550	409[c]	26
Secondary	1,140	393[c]	34
Key staff[c] at questionnaire level			
Primary	3,100	608[d]	20
Secondary	5,700	1,167[d]	20

[a]Questionnaires returned by heads. [b]Key staff include members of the senior leadership team and middle managers (e.g., Key Stage Leaders). [c]Schools with returned key staff questionnaires. [d]Returned key staff questionnaires.

contexts, including different levels of socioeconomic advantage as identified through the "Free School Meals" proxy and disadvantage and ethnic diversity (FSM Bands 1 and 2: 3 primary and 4 secondary; FSM Bands 3 and 4: 7 primary and 6 secondary). We also constructed, in interviews with principals, "lines of school improvement," using critical incident techniques. These allowed us to build holistic representations of the strategies for improvement that each principal had used over the period of their leadership. These were then mapped onto data showing changes in external measures of students' progress and attainment over the same period and external inspection grades for the schools. Interviews with principals and key staff prompted them to speak about those issues that were most significant to them in relation to the research aims and objectives and aspects identified as important in the literature review. Interviews with other colleagues in the school provided insights into their perceptions of the nature and impact of the practice and effectiveness of school (and, in secondary schools, departmental) leadership and its distribution.

Findings: How School Leadership Makes a Difference

1. Building and sustaining the right conditions for a sustained focus on the quality of teaching and learning: evidence from the first principal and key staff surveys.

Actions Identified by Principals as Most Important in Promoting School Improvement

In the first survey, principals were asked about the most important combinations of specific strategies that they felt had had the most positive impact on improving pupil outcomes over the past 3 years. Leadership strategies related to *improving teaching practices* and *promoting a stronger academic press or emphasis* were the most frequently cited strategies. More specific actions most commonly cited by primary principals as most important were as follows:

- Improved assessment procedures (28.1%)
- Encouraging the use of data and research (27.9%)
- Teaching policies and programs (26.0%)
- Strategic allocation of resources (20.4%)
- Changes to pupil target setting (20.2%)

For secondary principals, the actions/strategies viewed as most important showed strong similarities to the findings for primary principals, although the emphasis on the "use of data" was somewhat stronger, and secondary principals placed much more emphasis on changing school culture:

- Encouraging the use of data and research (34.0%)
- Teaching policies and programs (27.7%)
- School culture (21.1%)
- Providing and allocating resources (19.5%)
- Improved assessment procedures (18.6%)

There was consistent evidence in the first survey that both principals and key staff were positive about the role of instructional leadership strategies in promoting and sustaining the academic standards and expectations in their schools, which, to some extent, might be expected given the study's focus on more effective/improved schools. The large majority of the primary (69%) and secondary (64%) principals agreed strongly that "this school sets high standards for academic performance." Such a view was also shared by the key staff, with more than 90% in agreement ("strongly" and "moderately").

In particular, the use of performance data and monitoring were shown to be important strategies in the drive to raise standards in schools that make sustained improvement in raising pupil attainment—especially for those in disadvantaged contexts. The large majority of primary (79%) and secondary (91%) principals agreed strongly or moderately that "the performance of department/subject areas is regularly monitored and targets for improvement are regularly set." For

principals of primary schools, those in high disadvantaged schools ($N = 118$, 84%, vs. $N = 175$, 75%) were somewhat more likely to be in agreement with this ($p < .05$). Principals in low disadvantaged secondary schools ($N = 200$, 79%, vs. FSM 3 and 4: $N = 91$, 88%) were slightly less likely to agree strongly that "teachers regularly use pupil assessment data to set individual pupil achievement targets" ($p < .05$).

To explore the relationships between leadership, school process, and changes in pupil outcomes, exploratory factor analysis followed by CFA were used to investigate the possible structures underpinning the questionnaire data from principals and to test theoretical models about the extent to which leadership characteristics and practices identified in the earlier literature review (Leithwood et al., 2006) could be confirmed from the sample of effective and improved schools in England. Results showed that the underlying leadership factors identified for both primary and secondary principal surveys largely accorded with the conclusions of Leithwood et al.'s (2006) literature review. After deletion of missing data, the structural equation modelling (SEM) analysis was conducted with data for 309 secondary schools and 363 primary schools. The development of the models draws on but extends the cross-sectional approach that predicts student outcomes adopted in the earlier Leadership and Organisational Learning study in Australia by Silins and Mulford (2004)—as the factors identified in this research in the English context relate to improvement in school performance (as measured by change in student outcomes and progress). Results for the primary and secondary samples showed strong similarities. The SEM models predict changes (i.e., the extent of improvement) in student attainment over a 3-year period for our sample of effective and improved schools as the dependent variable. They demonstrated that the leadership constructs identified in the literature operated in ways in which we hypothesized in relation to influencing directly and indirectly a range of school and classroom processes that in turn predicted changes (improvements) in schools' academic performance. These dynamic, empirically driven models present new results on the leadership of a large sample of effective and improving schools in England and thus add to school improvement and leadership theories. Details of the exploratory factor analysis and CFA results and SEM models were reported in our final project report and other subsequent publications (Day et al., 2009; Day et al., 2011; Sammons et al., 2011; Sammons et al., 2014). In this article, we use the secondary SEM model as an example to illustrate how transformational and instructional leadership strategies were used by principals in our research to influence the processes of school improvement and, through these, improve pupil outcomes over time.

The secondary SEM model of leadership practice showed a relatively high internal consistency reliability of 0.950 (Figure 2). The model fit indices in Figure 2 suggest a "good" model–data fit (Hu & Bentler, 1999; Kaplan, 2004;
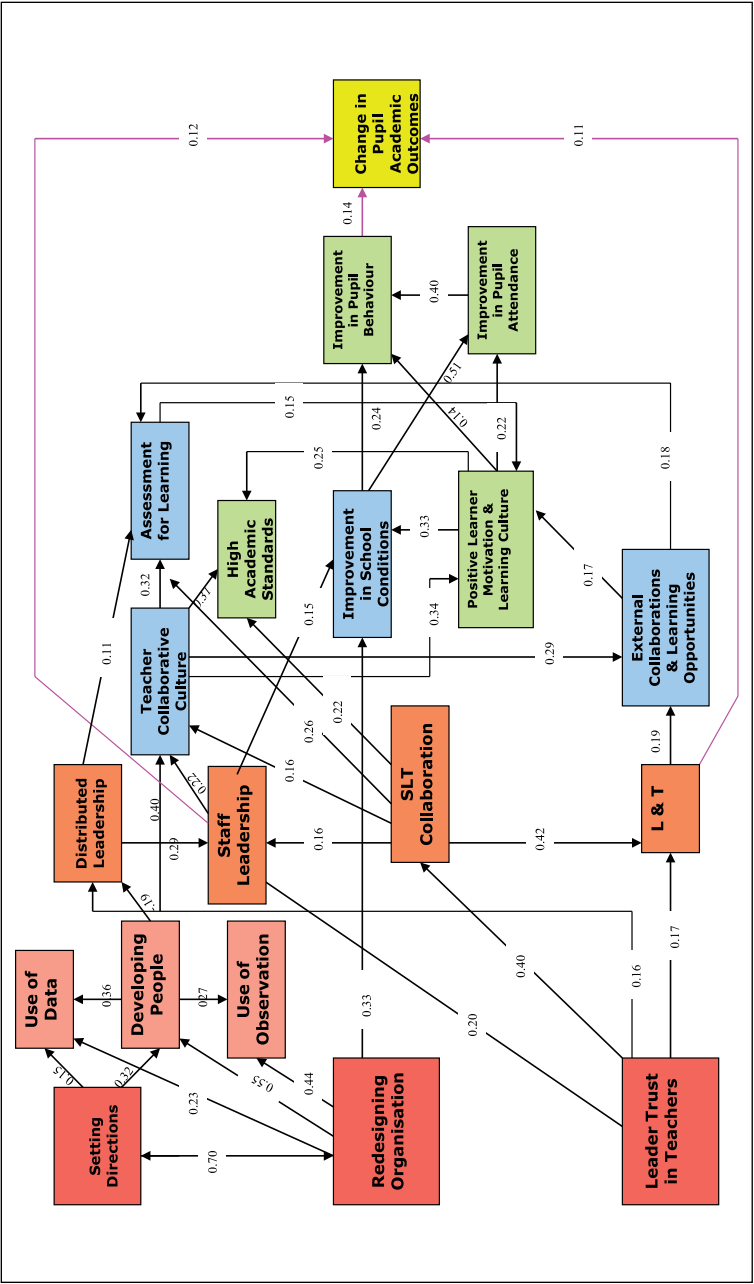
Figure 2. Example of leadership practices and changes in secondary pupil outcomes over 3 years: A structural equation model (*N* = 309 principal survey responses).

Kelloway, 1998; Kline, 2010). All latent variables were derived from the CFA, and Table 3 lists the observed variables (i.e., questionnaire items) that are associated with the latent constructs in the model. While all the links between the different latent constructs were statistically significant (as indicated by the *t* values at *p* < .05), some were stronger than others. The strength of these connections indicates which features of leadership practice were most closely linked for respondents to the surveys. Figure 2 shows that the school processes directly connected with principals' leadership strategies are the ones that also connect most closely with improvements in aspects of teaching and learning and staff involvement in leadership; these in turn help predict improvement in school conditions, and so, indirectly, improvement in pupil outcomes.

Four groups of latent constructs were identified in the SEM (as indicated by four different shadings in Figure 2) predicting change in pupil attainment outcomes. They are positioned from *proximal* (i.e., factors that are near to principal leadership and influence directly constructs such as "developing people" and school conditions) to *distal* (i.e., factors that are further removed from principal leadership and influence indirectly the intermediate outcomes such as pupil behavior and attendance). They represent robust underlying dimensions of leadership and school and classroom processes (i.e., latent constructs relating to key features of leadership practice and school and classroom processes) and highlighted strategies and actions that school principals and staff had adopted to raise pupil attainment.

> *Group 1* comprises three key dimensions of *principal leadership*: "Setting Directions," "Redesigning Organization," and "Principal Trust" plus three other major dimensions of "Developing People," "Use of Data," and "Use of Observation" strongly linked with the first two.
>
> *Group 2* comprises four dimensions in relation to *leadership distribution* in the school: "Distributed Leadership," "Leadership by Staff," "Senior Leadership Team" (SLT), "Collaboration," and the "SLT's Impact on Learning and Teaching."
>
> *Group 3* comprises four dimensions relating to *improved school and classroom processes* that seem to function as *mediating factors* in this structural model: "Teacher Collaborative Culture," "Assessment for Learning," "Improvement in School Conditions," and "External Collaborations and Learning Opportunities."
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> *Group 4* also comprises four dimensions: "High Academic Standards," "Pupil Motivation and Learning Culture," "Change in Pupil Behavior," and "Change in Pupil Attendance." These constructs identify important *intermediate outcomes* that had direct or indirect effects on measured changes in pupil academic outcomes for school over 3 years.

Table 3. Questionnaire Items That Underpin Each Latent Variable in the SEM Model (Secondary Principals).

Latent Variables	Questionnaire Items			
Setting directions	Demonstrating high expectations for staff's work with pupils	Demonstrating high expectations for pupil behavior	Demonstrating high expectations for pupil achievement	Working collaboratively with the governing body
Developing people	Encouraging staff to consider new ideas for their teaching	Promoting leadership development among teachers	Promoting a range of CPD experiences among all staff	Encouraging staff to think of learning beyond the academic curriculum
Redesigning the organization	Encouraging collaborative work among staff	Improving internal review procedures	Allocating resources strategically based on pupil needs	Structuring the organization to facilitate work
Use of data	Encouraging staff to use data in their work	Encouraging all staff to use data in planning for individual pupil needs		
Use of observation	Regularly observing classroom activities	After observing classroom activities, working with teachers to improve their teaching	Using coaching and mentoring to improve quality of teaching	
Leader trust in teachers	I feel quite confident that my teachers will always try to treat me fairly	My teachers would not try to gain an advantage by deceiving me	I feel a strong loyalty to my teachers	
Distributed leadership	Most leadership tasks in this school are not carried out by the Head and SMT/SLT	Many others take on leadership tasks		
Staff leadership	Groups of teachers	Individual teachers with formally assigned tasks	Individual teachers acting informally	

(continued)

Table 3. (continued)

Latent Variables	Questionnaire Items			
SLT collaboration	SLT playing a role share a similar set of values, beliefs, and attitudes related to teaching and learning	Participate in ongoing collaborative work	Have a role in schoolwide decision making	
SLT impact on L and T	SLT have a positive impact on standards of teaching	SLT have a positive impact on raising levels of pupil attainment	SLT have a role in determining the allocation of resources to pupils	
Teacher collaborative culture	Most teachers in our school share a similar set of values, beliefs, and attitudes related to teaching and learning	Teachers in our school mostly work together to improve their practice	There is ongoing collaborative planning of classroom work among teachers in our school	Teachers in this school have a sense of collective responsibility for pupil learning
Assessment for learning	The performance of department/ subject areas is regularly monitored, and targets for improvement are regularly set	Pupils are regularly involved in assessment for learning	Class teachers regularly use pupil data to set individual pupil achievement targets	
Improvement in school conditions	School experienced enhanced commitment and enthusiasm of staff	Promoted an orderly and secure working environment	Improved pupil behavior and discipline as a result of a whole school approach	
External collaborations and learning opportunities	Parents often visit the school	The school is actively involved in work with other schools or organizations	There are more opportunities for pupils to take responsibilities for their own learning in school now than 3 years ago	

Table 3. (continued)

Latent Variables	Questionnaire Items		
High academic standards	Pupils in this school can achieve the goals that have been set for them	Most pupils do achieve the goals that have been set for them	This school sets high standards for academic performance
Positive learner motivation and learning culture	Pupils' respect others who get good marks	Change in pupils' motivation in learning	Pupils feel safe in our school
Improvement in pupil behavior	Changes in physical conflict among pupils	Physical abuse of teachers	Verbal abuse of teachers
Improvement in pupil attendance	Changes in pupils' lateness to lessons	Pupils' lateness to school	Pupils' missing class

Note. SEM = structural equation modelling; CPD = continuing professional development; SMT = senior management team; SLT = senior leadership teams.

These groups of latent constructs, driven by theories of school leadership and school improvement, were identified in the process of model building. As the SEM shows, the leadership practices of the principal (Group 1 dimensions) and of the SLT (Group 2 dimensions) influence, directly or indirectly, the improvement of different aspects of school culture and conditions (Group 3 dimensions), which then indirectly influence the change in pupil academic outcomes through improvements in several important intermediate outcomes (Group 4 dimensions). Some of the dimensions (latent constructs) in the model have direct effects on dimensions at more than one level. For example, to create a collaborative culture among teachers (Group 3), "Leader Trust in Teachers" (Group 1) is shown to be critical not only in terms of directly influencing the building and development of such a culture but also indirectly influencing the culture through distributing leadership to the "Staff" and promoting "SLT Collaboration" (Group 2). In addition, three dimensions (latent constructs) were found to have small direct effects on change in "Pupil Academic Outcomes": "SLT's Impact on Learning and Teaching," "Leadership by Staff," and "Improvement in Pupil Behavior."

While the direct effects of school leadership on pupil outcomes are generally found to be weak (Leithwood et al., 2006), these effects should be interpreted in relation to the size of the effects of other school variables, which are

also generally found to have relatively small effects in comparison with teacher effects (Creemers & Kyriakides, 2008). Leithwood, Patten, and Jantzi (2010) argue that it is likely that the influence of different leadership practices travel different routes (i.e., influence different mediators) to improve student outcomes. As a way of interpreting the complex direct and indirect effects in our model, we suggest that "synergistic influences" may be promoted through the combination and accumulation of various relatively small effects of leadership practices that influence different aspects of school improvement processes in the same direction, in that they promote better teaching and learning and an improved culture, especially in relation to pupil behavior and attendance and other pupil outcomes such as motivation and engagement.

Such *synergy of leadership influences* is also related to the ways in which transformational and instructional leadership strategies (Groups 1 and 2) were used in combination by secondary principals in our survey to create and build the structural and cultural conditions (Groups 3 and 4) necessary for school improvement. As the SEM model shows, transformational leadership strategies relating to setting directions and restructuring the organization for change (Group 1) set the departure point for their schools' improvement journeys and, from our case study data, are shaped by the principal's skills in diagnosis of their school's performance and needs. These strategies served to raise expectations and provide organizational structures that promoted collaborative work among teachers (see Table 3 for observable variables attached to these latent constructs). Building trusting relationships with teachers and the senior leadership team (Group 1) was shown to be another key leadership strategy that enabled the distribution of leadership across the school (four latent constructs at Group 2) and, through this, the transformation of the social and relational conditions of schools (Group 3: "teacher collaborative culture," "improvement in school conditions," and "external collaborations and learning opportunities").

As Table 3 shows, observed leadership strategies that are related to instruction tend to be loaded on their respective latent factor while those that are related to transformation and change form distinct latent variables. What is clear, however, is that neither instructional leadership strategies nor transformational leadership strategies alone were sufficient to promote improvement identified by the SEM model. Leadership strategies that built on change in organizational structures and conditions but that focused more closely on developing people to become innovative and more rigorous in their teaching practices and to learn to use data and observation to improve their teaching (Level 1; see Table 3 for observable variables) also played an important role in school improvement processes. As the SEM model shows, they contributed to "positive learner motivation and learning culture," "high academic

standards," and "improvement in pupil attendance" (Group 4) through leadership distribution (Group 2) and "teacher collaborative culture" and "assessment for learning" (Group 3). The SEM analysis of the responses of primary school principals showed very similar results, suggesting that leadership operated in similar ways across the two sectors.

We view the models as dynamic representations of the use of both transformational and instructional strategies by principals as they seek to identify the ways in which different dimensions that relate to features of leadership and school and classroom processes link with, and predict improvements in, schools' internal conditions and various pupil outcomes. The results suggest that school and leadership effects would be expected to operate most closely via their influence on developing teachers, improving teaching quality, and promoting a favorable school climate and culture that emphasize high expectations and academic outcomes. In addition, they showed connections between other important intermediate outcomes such as the retention and attendance of staff, improvements in pupil attendance and behavior, and perceived increases in pupil motivation, engagement, and sense of responsibility for learning—all of which were themselves linked by the dynamic combination and accumulation of different leadership values, strategies, and actions. The models and case studies indicate that their various effects on school improvement processes and outcomes were both interactive and interdependent in our sample of effective and improving schools.

Although of value in identifying patterns and testing hypothesized relationships, and a range of interconnected leadership actions and strategies, on their own, these SEM quantitative analyses were not able to reveal what kind of leaders these principals were. Nor could the SEM illuminate how they diagnosed their schools' needs or were perceived by their colleagues or the different ways in which combinations of strategies were applied by principals in particular contexts and at particular times and the reasons for this. Evidence from the case study investigations provides complementary, rich illustrations and insights as to *how* the "synergistic effects" of different dimensions of transformational and instructional leadership strategies on students' academic outcomes are achieved in different phases of schools' development *over time*. The use of mixed methods thus enabled deeper insights and explanations to emerge.

2. School improvement phases: The layering of transformational and instructional leadership strategies.

Two key findings that resulted from the project's mixed methods approach concerned the identification of clear, interrelated, phases in the schools'

improvement trajectories (reflecting the dynamic nature of improvement) and, within these, what we have termed, "the layering of leadership."

Phases of School Improvement

Toward the end of the field research, we used focused interviews to discuss the school's improvement trajectories and the school's leadership since the principal's appointment. Principals and their key staff identified various combinations of actions and strategies that had contributed to school improvement as defined by improvements in student attainment, evidence from external Ofsted inspection reports and their own vision and broad educational purposes during their tenure. By plotting these on a time graph, then identifying significant turning points, each principal created a detailed "line of school improvement" that extended through a number of school improvement phases during their time at the school. The conceptualization of phases of school improvement focuses on how and why *some* leadership actions are contextually appropriate at a point in time. Together, these actions are able, individually and in combination, to make a difference to aspects of school improvement processes and enable schools to develop capacity and achieve intermediate successes that are essential for them to move on to the next phase of school improvement. There will be overlaps in terms of leadership practices (or "variables") in-between phases—thus, layering the foundation for the next phase. Some practices continue to be important across phases.

It is important to note that there are differences between "phases" and "time periods." Depending on the capacity at the departure point for improvement and many other associated leadership and contextual factors, different schools may, for example, take longer to move from Phase 1 to Phase 2, while others may need a shorter period of time. Some schools in our case studies took, for example, 6 months to move from Phase 1 to Phase 2. The example we give in this article (Figure 3) took longer than that (3 years).

Nevertheless, while there were differences in the number and variations in the length of these phases, on close analysis, four broad improvement phases were identified across the 20 cases: *foundational*, *developmental*, *enrichment*, and *renewal* phases (see Figure 3).

In the *foundational phase* of principals' leadership, key strategies relating to transformational leadership (e.g., developing vision, setting directions, building a "core" senior leadership group with common purpose) were used, together with instructional leadership strategies (e.g., raising teacher performance expectations of self and pupils; improving pupil behavior; improving the physical, social, psychological, and emotional conditions for teaching and learning; and using data and research). They were combined to ensure

The line represents the head's view of their leadership success in terms its of effect upon a broad range of pupil outcomes during their tenure as head

1: Foundational Phase: Urgent Attention Back to Basics (3 years)
- Autocratic Leadership
- Restructuring SLT (9 redundancies enable restructuring)
- Built new SLT – Focus on building different teams and interlocking teams
- New Staff structure
- Staff Training on OFSTED
- Involving and empowering governors
- *Raising expectations and standards of classroom teaching and learning*
- *Improving the physical environment*
- *Improving pupil behaviour and attainment*

2: Developmental Phase: Rebuilding and Making School more Student-Centred (2 years)
- Development of new school ethos with focus on teaching and learning
- Pupil Voice: Introduced Hay perceptions – Transforming learning; pupils asked to comment on 9 aspects of classroom environment and teaching – their views taken into account
- Focus on improving behaviour and clamp down on truancy (winning Truancy Award in 2001)
- Building new pastoral system
- *Classroom observations for all and coaching*
- *Mechanisms for ineffective staff to be worked out*
- *Raising pupil self-esteem with target setting*

3: Enrichment Phase: Period of Reflection and Curriculum Development (2 years)
- More pupil voice and pupil centered environment
- Training with SLT and middle leaders
- Delegated leadership and devolved responsibility – making people accountable
- Developing a strong school ethos and raising expectations
- Linking SLT members with a Head of Faculty. Made significant contribution to shared school ethos and tackling difficult issues. Also provided confidence and support to middle leaders
- *Not allowing pupils to fail – introduction of coursework clubs*
- *Pathways developed to meet pupil needs*
- *Focus more towards learning than teaching*

4: Renewal Phase: Distributed Leadership (3 years)
- More delegation
- Staff inductions for NQTs
- Establishing common base lines – appoint best trainees
- Partner school with several universities for ITT
- Improved ethos and atmosphere
- Focus on pupil needs
- Focus on ECM – more fun and pupils more involved in school life; more pupil centred activities and pupil voice
- New pastoral ethos – non-teaching assistants
- *Enrichment activities*
- *Emphasis on pupil personal development*
- *Personalising the curriculum to meet pupil needs with different pathways – to be further developed in the future*

1996	2000	2002	2004	2008

Ofsted: Poor

Ofsted: Very Good

Ofsted: Satisfactory (Outstanding in most respects but a problem in Maths department, leading tto this outcome)

Figure 3. Principal's line of success: Eyhampton Secondary School.
*To distinguish transformation and instructional leadership strategies, we have placed strategies that focus on improving the quality of teaching and learning in italics.

that certain "basics" were in place. Three particular strategies were prioritized in this foundational phase.

    a.   Improving the physical environment of the school for staff and pupils to create positive environments conducive for high-quality teaching and learning.

Principals recognized the importance of creating a physical environment in which all staff and students felt inspired to work and learn. Changes to the school buildings varied in scope from increasing visual display in classrooms, corridors, and reception areas to the creation of internal courtyards and entirely new buildings. For example,

> When [the principal] first came here the biggest impact that she made her number one priority was the environment. And everything went into the environment. That was the focus, nothing else, which I think is great because if you try to do too many things too soon, I don't think we'd have got where we are today. So that was the one big thing. (Primary teacher, Round 1 Interview)

    b.   Setting standards for pupil behavior and improving attendance.

Strategies for improving pupil behavior initiated in the early phase often included changes to uniform, systems for monitoring attendance patterns, and follow-up of unauthorized absence.

> Behavior was seen as a whole-school collegiate approach. We refined classroom rules and had the same classroom rules and expectations displayed in each classroom, so we were having, I think, more emphasis on a unified approach to behavioral issues so students knew the ground rules and what to expect. (Secondary Head of Department, Round 5 Interview)

    c.   Restructuring the senior leadership team and redefining the roles, responsibilities, and accountabilities of its members.

Both primary and secondary school principals prioritized the early creation of a Senior Leadership Team around them that shared and championed their values, purposes, and direction for the school. They viewed this as essential to enable the development of other important improvement strategies.

> In the first year [of the] new SLT structure, that was partly good luck because the existing senior deputy left and that gave me the chance to restructure . . . basically bringing more people onto the team. The previous structure had been

a head, two deputies, and two senior teachers, and I made it a head, a deputy, and five assistant principals. The number of assistant principals has increased with time. The idea was to have more people involved. That has been a key plank all the way through, to try and be less hierarchical than it had been before. (Secondary Principal, Round 5 Interview)

Only later did they distribute leadership responsibilities to the middle leaders and other staff.

In the *developmental phase* of principals' leadership, two key transformational and instructional strategies were prioritized. First, there was *wider distribution of leadership* with the focus being placed on redesigning organizational roles and responsibilities to extend leadership across the school, build leadership capacity, and, through this, deepen the scope and depth of change. By the second phase, all but two of the 20 case study principals were distributing significant decision making both to the senior leadership team and to a larger group of middle leaders. The additional distribution of responsibility was very much a function of growing trust and trustworthiness. For example,

We've always been involved in leading but I think it is distributed more between the whole staff now rather than just the senior leadership. (Primary Deputy Headteacher, Round 5 Interview)

Second, systematic classroom observations and *increasing the use of data-informed decision making* to improve the quality of teaching and learning were key features of practice in all schools (i.e., instructional focus). Data were used to identify those who needed extra support, facilitating increases in opportunities for personalized learning.

[These] data are what then help us to track progress within the school on [a] whole-school level and for a department because clearly each pupil is set targets when they join us in Year 7. (Secondary Head of Department, Round 3 Interview)

Building on the growth of achievement and its positive effects on teachers' and students' sense of confidence and stability in the foundational and developmental phases, the key strategies that principals prioritized in the *later enrichment* and *renewal phases* focused on the further personalization of learning and enriching of the curriculum. Throughout these phases, the emphasis on quality (of learning as well as teaching), classroom observations, target setting, and pupil participation in learning was increased. Personalization (in Phase 4) was reflected in an increasing emphasis on

teaching that promoted more participative, interdependent, independent, and flexible learning and that supported a range of approaches to pupil learning. The relationships between the extended use of data and personalizing the curriculum (instructional leadership) were highlighted by staff and the senior leaders as key strategies that affected improved pupil outcomes. For example,

> It would be the assessment and tracking systems. I think that has got to be. I had taken a long time to get there and I think at some stage that people thought that (Principal) was just filling in more forms for us, but I think that now people have realized that there is benefit, that from the systems we can narrow it down to individual pupils who might need differentiated approaches, personalized learning. It is not just one size fits all. (Primary Deputy Principal, Round 3 Interview)

Curriculum enrichment (as part of instructional leadership) refers to broad pupil outcomes and development of the whole pupil. It focuses on social and emotional learning and provision of creative, cross-curricular or skills-based learning. For primary schools, the emphasis tended to be on making the curriculum more creative, flexible, and enjoyable for the pupils, aiming to inspire and interest them, with the aim of producing a more rounded individual. For secondary schools, flexibility and enjoyment were also central. This would sometimes involve whole days off timetable, working on cross-curricular projects or skills-based learning. Specialist school status often helped focus on these days and use the specialism as a guide, such as science fun days or adding extra dimensions to sports days.

The Layering of Leadership

These phases of improvement contained within them, then, different combinations of actions and strategies relating both to transformational and instructional leadership. At certain times, principals emphasized some more than others. They made judgments, according to their values and diagnoses of context, about the timing, selection, relevance, application, and continuation of strategies that created the optimal conditions for both the motivation, well-being, and commitment of staff and effective teaching, learning, and pupil achievement within and across broad development phases. Some strategies did not continue through each phase, an example being "restructuring and redesigning roles and responsibilities," which was a particular feature of the early phase. Others grew in importance and formed significant foundations on which other strategies were built. Thus, they grew, nurtured, and sustained

school improvement by combining and accumulating what we identified as "layered leadership" strategies and actions that were both transformational and instructional.

For the purpose of this article, we have selected the story of a secondary case study school that provides an example of how the principal selected, combined, and accumulated strategic actions, placing relatively more or relatively less emphasis on one or more at any given time and over time, to ensure school improvement. In doing so, the principal was demonstrating not only the possession and use of key values, qualities, and skills (i.e., an ability to diagnose and problem solve and an ability to exercise judgments about selection, timing, and combination of strategies that were sensitive to individual and organizational contexts) but also highly attuned cognitive and emotional understandings of the needs of individual staff and students and of the concerns of both national government and local community. This example is used to illustrate how and why school leaders in our case study schools were able to influence others and achieve and sustain success over time in the contexts in which they worked, such that they not only transformed the conditions and culture of a school but, more importantly, developed and transformed the people who shaped and were shaped by the culture. Together, these resulted in continual improvement in student learning and achievement.

Eyhampton High School: From "Notice to Improve" to "Outstanding"

Context

Eyhampton is a 13 to 19 age mixed comprehensive school. It was situated in an area of high industrial deprivation, where few parents had a history of accessing further education. Aspirations and academic expectations in the community were typically low, although students came from a range of backgrounds. At the time of our visits, the school was below average size, with 793 pupils on the roll. It provided a range of opportunities for trips and visits, opportunities for achievement through sport, opportunities for performance through theatre and music arts, and opportunities for citizenship through involvement in a range of community activities.

The school was struggling with low attainment, poor behavior, a poor reputation locally and a poor external inspection report when Graham, the new principal, arrived. He felt that strong authoritarian leadership was what was needed at that time to raise aspirations and change the underachieving school culture. He had worked as a modern foreign languages teacher and

senior leader in a number of schools in a different region of England before joining this school 10 years earlier. Over the 10 years of his leadership, he had worked hard and successfully to change the physical environment, culture, and capacity and raise student performance of the school. In 2006, the leadership of the principal and senior staff was described as "outstanding" by the external national inspection agency, and by 2010, the school itself achieved an overall grade of "outstanding." The school's attainment levels measured by national benchmarks and value-added indicators of student progress also revealed the school's transformed performance.

Four School Improvement Phases

Phase 1 (Foundational): Urgent attention, back to basics (3 years). Typical of the secondary schools in the sample, this principal began his tenure with a wide-ranging redesigning of the organizational roles and responsibilities, particularly within the leadership team. He had strong values, a sense of moral purpose, and a desire to raise standards for pupils in this disadvantaged and declining ex-mining area. There was a clear emphasis on high expectations and raising aspirations, which continued throughout. This led to a major focus on pupil behavior and teacher and teaching quality as well as an improvement in the physical environment. During this phase, the principal focused on six leadership strategies, which, together, illustrate his twin focus on transformational and instructional leadership strategies:

1. *Redesigning the leadership and staff teams:* Initially the principal, Graham, built a new SLT and focused on building and interlocking teams. He made a number of key appointments in the early stages and then later reduced the number of middle managers and the size of the SLT to widen participation and make the leadership structure stronger and flatter.
2. *Training and development for all:* Typically, he focused on school-based and school-led professional learning and development, which he saw as better value for money than external training. He provided a comprehensive range of training and monitoring for all staff, and in the first phase, the emphasis was on raising standards using the national inspection criteria.
3. *School ethos and high expectation:* This was described as "not easy." However, the principal was "fortunate" as many of the staff who were initially resistant to change chose to retire or move, thus leaving the way clear to develop the new ethos and "get the floating voters on board."

4. *Pupil behavior:* The early change to a school uniform and the development of a focus on discipline and high behavioral expectations were key elements in instilling the new culture into the school. These measures were accompanied by the development of a new pastoral system, led by a member of the SLT, to ensure that the higher expectations were accompanied by pupil support and guidance.

5. *Improving the physical environment:* Some of the buildings were completely remodeled and this was an ongoing process. One of the first changes made by the principal was to create environments in each classroom that were conducive to learning.

6. *Raising expectations and standards of classroom teaching and learning:* This was an important strategy, both desirable (in terms of moral purpose and service to pupils) and necessary (in terms of securing external judgments of quality).

Phase 2 (Developmental): Rebuilding and making the school more student-centered, continuing focus on the quality of teaching and learning (2 years). The strategies used by Graham in Phase 2 again illustrate his combination of transformational and instructional leadership. In this phase, there was a continued focus on performance management of staff, high expectations, and improving teacher and teaching quality. Pupil behavior was also a continuing priority and addressed through the pastoral care system. Pupil voice was given greater importance. Five key leadership strategies were the focus of this phase:

1. *Performance management—Observation and coaching:* All staff were regularly observed and strengths and weaknesses were identified. Coaching and support were available for all to enable them to meet the high expectations. Peer observation also began to play a role in development. It was in this phase that the school increased the number of preservice students enrolled in school-based teacher training.

2. *High expectations and use of data:* To continue to raise aspirations, Graham introduced the use of data and target setting. This was seen as crucial to promoting higher academic standards and change in staff and student attitudes and in the school culture. In addition, he established a "pupil exclusion" center and a "flexible learning" center, which were used to manage teaching and learning for pupils with a range of special learning and behavioral needs.

We track the children really closely, which is not something that all of the departments do within the school, or are trying to do. And we are then able to send letters home, for example, termly, to tell the parents where they're at . . .

and what percentage, so on and so forth. We're also quite motivational. (Principal, Round 2 Interview)

3. *Pupil behavior and pastoral care:* The focus on pupil behavior continued into Phase 2, and to ensure that pupils had the support they needed to achieve, the pastoral care system was strengthened. A collegial approach to student behavior management was adopted by all staff, and classroom rules were refined early in Graham's leadership.

We have very positive and supportive teacher pupil relationships. We have worked on pupil management strategies and assertiveness of staff. They can't be aggressive or pupils will be aggressive back. (Head of Department, Round 1 Interview)

4. *Pupil voice:* The profile of pupil voice was increased. Graham introduced a questionnaire through which pupils could comment on lessons, teaching and learning, and other aspects of school life. A student council was also introduced early on, and this grew in influence over time. The school council was consulted at every level, even staff recruitment. Opinions of its representatives were taken into account and had a significant influence on new appointments. The school council grew in many ways and provided the pupils with leadership opportunities.
5. *Becoming a (preservice) training school:* The school enjoyed strong links with universities and became a training school in this phase, enabling it to develop and then recruit newly qualified teachers who understood the ethos of the school.

Phase 3 (Enrichment): Period of reflection and curriculum development (2 years). In this phase, Graham distributed leadership more widely as a consequence of the trust that had developed over the previous phases. Again, both staff and students were at the center of his layering of values-based leadership strategies. He also expanded the curriculum significantly, enriching the experience of the pupils and making their options more personalized and pupil-centered. It was also in this phase that the school achieved "Specialist" status as a Sports College. Four key leadership strategies strengthened the school's earlier achievements and extended its development.

1. *Distribution of leadership:* Graham and his assistant principal took most of the strategic decisions in the *foundational* phase, but over time, this process became more distributed. In the third phase, decisions were taken with the whole of the SLT.

2. *Curriculum enrichment, personalization, and pupil-centered learning:* A new curriculum was designed to "meet the enormous range of needs that we have in the school, right from children who can't cope in the classroom . . . to pupils who will go to Cambridge" (Assistant Principal). In addition, pupils took more responsibility for their own learning, having a greater awareness of and responsibility for identifying and achieving their learning objectives. The expansion and personalization of provision of the curriculum took place throughout the school and had a powerful effect on pupil outcomes.

3. *Developing the school ethos and raising aspirations:* There was a renewed focus on developing the school ethos, accompanied by a continued emphasis on raising expectations.

The school culture is one of understanding, at the forefront, respect, warm and friendly. It's fast and demanding as well. (Key Stage 4 Curriculum Coordinator, Round 1 Interview)

4. *Specialist status—Building an improved environment:* The achievement of specialist status enabled the school to release funds for further improvements to its physical environment.

Phase 4 (Renewal): Distributed leadership (3 years). Graham took further steps toward distributing leadership more widely, ensuring that all teachers were able to take on some leadership responsibility, a further extension of the trust built through the increased participation in leadership roles during the previous phase. Perhaps the most important change in this phase was the introduction of nonteaching staff as "inclusion managers," who were responsible for pupil behavior and emotional issues. Finally, the deeper strategic work on the curriculum also had a big impact in this phase, with a more highly personalized and enriched curriculum.

1. *Further distribution of leadership:* More responsibility was given to the faculty leaders to run their own departments. Also, leadership responsibilities were further devolved to middle leaders and other staff. Where the principal used to lead all the staff meetings, in this phase, he encouraged staff to take the lead. They were supported in their decision making and encouraged to find their own solutions, knowing that they could approach the principal whenever they needed guidance.

[The principal] wants staff to think of solutions, not to bring him problems. He gives responsibility to people. (Assistant Principal, Round 1 Interview)

2. *Further pastoral restructuring—focus on learning and inclusion:* The introduction of nonteaching pastoral staff was a common feature in many of the case study schools, and all reported how much this benefited behavior. With the increased support, the pupils cooperated more with staff. This new system helped provide an environment that was strict and yet supportive, regarded as "essential in this context." New "learning" and "inclusion" managers focused on behavioral issues and worked regularly with those pupils who required it. This monitoring and learning support allowed the school to meet the needs of individuals and work, essential in an area where the pupils have diverse needs and capacities.

3. *Further curriculum enrichment and personalization:* Pupils had a more extensive range of options available to them, and this provided opportunities for all pupils to succeed. Key elements of this new focus were "enrichment" days and community involvement.

> Just for example, for Year 10 we had a crime and punishment day. So we had the justice system in, we had judges in, we set up a mock trial, we had the police in talking about forensic science, we had a youth offending team, we had convicted people in talking about what happened to them. So it's citizenship and I think it's true, it's for them really. (Principal, Round 2 Interview)

Figure 3 shows how Graham established, combined, and built on strategies over time. It provides an illustration of the ways in which both transformational and instructional leadership strategies and practices were layered and developed over the course of the school's improvement journey. While some strategies, such as restructuring, which was a particular feature of the early phase, did not continue through each phase, others grew in importance, and others formed foundations on which other strategies were built. An example of the integration of transformational and instructional strategies is "pupil behavior," which figures in different ways in all phases of Graham's tenure (see Figure 3), expressed as "pupil behavior" in Phase 1, "pupil behavior and pastoral care" and "pupil voice" in Phase 2, "pupil-centered learning" in Phase 3, and "focus on learning and inclusion" in Phase 4. Alongside this focus on instructional leadership was an emphasis on, for example, "redesigning the leadership and staff teams" in Phase 1, "performance management: peer observation and coaching" in Phase 2, distribution of leadership to a small group of colleagues in Phase 3, and the "further expansion of leadership distribution and trust" in Phase 4. The growing confidence in using data, which began in Phase 2, was a necessary step on the way to developing a complex personalized curriculum in Phases 3 and 4. The two strategies then continued to develop in tandem. By the latest phase, a range of strategic actions was being simultaneously implemented,

though not all with the same degree of intensity. While some had a higher priority than others, it was the context-sensitive combination and accumulation of actions, along with timely broadening and deepening of strategies, that allowed the later strategies to succeed, and made it possible for Graham's leadership to have such a powerful impact on pupil outcomes.

Discussion and Conclusions: Both Transformational and Instructional Leadership Are Necessary for Success

The complementarity of the quantitative and qualitative methodologies enabled this research to identify patterns and common strategies used by principals of effective and improved schools in England and probe the qualities and context-specific strategies and actions over time. The principals

- measured success both in terms of pupil test and examination results and broader educational purposes
- were not charismatic or heroic in the traditional sense. However, they possessed a number of common values and traits (e.g., clarity of vision, for the short and longer term, determination, responsiveness, courage of conviction, openness, fairness) and their work was informed and driven by strong, clearly articulated moral and ethical values that were shared by their colleagues
- were respected and trusted by their staff and parental bodies and worked persistently, internally and externally, in building relational and organizational trust
- built the leadership capacities of colleagues through the progressive distribution of responsibility with accountability, as levels of trust were built and reinforced
- placed emphasis on creating a range of learning and development opportunities for all staff and students
- used data, research, inspection evidence, and observation as tools to enhance teaching and learning and thus to support school improvement
- combined and accumulated both transformational and instructional leadership strategies within, through, and across each developmental phase of their schools' long-term improvement.

In addition, principals whose schools drew their pupils from highly socio-economically disadvantaged communities faced a greater range of challenges in terms of staff commitment and retention and student behavior, motivation,

and achievement than those in more advantaged communities. Principals of primary and secondary schools in all contexts were able to achieve and sustain successful pupil outcomes, but the degree of success was likely to be influenced by the relative advantage/disadvantage of the communities from which their pupils were drawn.

These results draw attention to Hallinger's (2005) argument that leadership should be viewed as a process of mutual influence, whereby instructional leaders influence the quality of school outcomes through shaping the school mission and the alignment of school structures and culture. This in turn promotes a focus on raising the quality of teaching and learning (instructional leadership). The extent to which influence is perceived, felt, and "measured" in terms of students' academic gains can only be judged over time; and how influence is exercised positively or negatively over time can in part be seen in the conditions, structures, traditions, relationships, expectations, and "norms" that make up the cultures of schools. In the effective and improving schools in our study, principals palpably exercised both "transformational" and "instructional" leadership. We have seen this both in the presence of "trust," for example, in the quantitative findings and clear evidence of the strategies used to raise expectations and build the commitment and capacities of teachers, students, and community in the qualitative case studies. Both "transformational" and "instructional" leadership strategies were, therefore, used in combination, as Printy et al. (2009) would claim, in an "integrated" leadership model. However, even for these successful principals like Graham, integration took time.

Like all research, the IMPACT project had its limitations. So, for example, while it was able to draw on national data based on effective and improving schools in all socioeconomic and geographically distributed contexts, the initial judgment of "effectiveness" was that which related to performance in national tests and examinations and the judgments made by Ofsted (the United Kingdom's independent school inspection agency). The structural equation model used to illustrate our quantitative conclusions was based on the responses of the principals only and not their staff (although further work has supported the models; e.g., Sammons et al., 2014). Moreover, we drew from only those schools in the national data base that had improved over at least 3 consecutive years under the leadership of the same principal. In the 20 school cases, we were able to interview a cross-selection of staff and other stakeholders over 3 years but did not directly observe the principals at work.

Nevertheless, findings of the research both confirmed the observations of a range of previous research and enabled, through its mixed methods approach, new knowledge to be generated about the ways in which the strategies, actions, and values of the principals and their relationships with teachers, parents, and

the community were grown, accumulated, combined, and applied over time in different contexts in ways that resulted in ongoing sustained school improvements. The qualitative component of the IMPACT study, in particular, adds to the growing body of research that suggests that successful principals use the same basic leadership practices. It found, also, that there is no single leadership formula for achieving success. Rather, successful principals draw differentially on elements of both instructional and transformational leadership and tailor (layer) their leadership strategies to their particular school contexts and to the phase of development of the school. When and how they do so, and the relative emphases that they place on these in different phases of their schools' improvement trajectories, depend on their ongoing diagnoses of the needs of staff and students, the demands of the policy contexts and communities that their schools serve, clear sets of educational beliefs and values that transcend these, and the growth of trust and trustworthiness:

> Is it a surprise, then, that principals at schools with high teacher ratings for "institutional climate" outrank other principals in developing an atmosphere of caring and trust? (The Wallace Report, 2011, p. 6)

The work of successful principals, like that of the best classroom teachers, is intuitive, knowledge informed, and strategic. Their ability to respond to their context and to recognize, acknowledge, understand, and attend to the needs and motivations of others define their level of success. Successful principals build cultures that promote *both* staff and student engagement in learning *and* raise students' achievement levels in terms of value-added measures of pupil progress in national test and examination results.

Much has been written about the high degree of sensitivity that successful leaders bring to the contexts in which they work. Some would go so far as to claim that "context is everything." However, the IMPACT research suggests that this reflects too superficial a view of who successful leaders are and what they do. Without doubt, successful leaders are sensitive to context, but this does not mean that they use qualitatively different practices in every different context. It means, rather, that they apply contextually sensitive combinations of the basic leadership practices described earlier. The ways in which leaders apply these leadership practices—not the practices themselves—demonstrate responsiveness to, rather than dictation by, the contexts in which they work. They also demonstrate their ability to lead and manage successfully and to overcome the extreme challenges of the high need contexts in which some of them work. Success, then, seems to be built through the synergistic effects of the combination and accumulation of a number of strategies that are related to the principals' judgments about what works in their particular school context.

The evidence in this article also suggests that there is a value in using mixed methods approaches to identify and study leadership and to move beyond the oversimplistic promotion of particular types or models of leadership (an adjectival approach to improvement) as the key to enabling success, recognizing that what leaders do (strategies and actions) and their personal qualities (values and relationships) are more important. Future research should move beyond the use of single-paradigm models that may, despite their apparently technical rigor, provide somewhat simplistic dichotomies or limited accounts of successful school leadership. Rather, to increase understanding, we need research that combines and synthesizes results and evidence from different methodological perspectives to provide more nuanced accounts and insights that can inform and support improved practice.

Declaration of Conflicting Interests

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Note

1. It is important to note that all principals had led their schools for more than 5 years. Thus, informants were able to draw on a considerable bank of experience of the nature, impact, and effects of their principals' leadership. Direct quotations used in this article, as indicated, are drawn from a range of interviews over time.

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