

**TOWARD INSTRUCTIONAL LEADERSHIP:
PRINCIPALS' PERCEPTIONS OF LARGE-SCALE ASSESSMENT IN SCHOOLS**

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This paper describes a study of the perceptions that Saskatchewan school principals have regarding large-scale assessment reform and their perceptions of how assessment reform has affected their roles as principals. The findings revealed that large-scale assessments, especially provincial assessments, have affected the principal in Saskatchewan more positively than negatively or not at all, and that large-scale assessments appeared, in some cases, to have catalyzed the principals to move toward practices of instructional leadership, including goal setting, improving instructional practices, and measuring changes in student learning. Implications are included.

Introduction

A growing body of research on effective schools demonstrates relationships between leadership focused on outcomes and student success (Crum & Sherman, 2008; Dinham, 2005; Leithwood & Jantzi, 2008; Leithwood, Patten, & Jantzi, 2010). At the same time, research exploring the relationship between leadership and student learning in the context of the current accountability movement has shown extensive implications for the role of the principal (Elmore, 2008; Leithwood, 2000; Renihan, 2008). Historical changes to the role of the principal, including recent decades, have expanded the principal's role and increased its complexity, demanding more time of the principal than ever before (Goodwin, Cunningham, & Childress, 2003; Lashway, 2003).

As a result, some principals are struggling with increased stress on the job, challenging and rigid reporting requirements, and lack of time to do the work (Tirozzi, 2001; Volante, Cherubini, & Drake, 2008). Although encouraged by leadership theory, some principals struggle with abandoning managerial roles for instructional leadership roles, but are confronted with little professional development support (Hargreaves, 2009; Volante, et al., 2008). Others perceive themselves as not capable of handling this “daunting set of expectations” (Noonan & Renihan, 2006, p. 9). Despite these efforts, many succumb to the middle manager role of the principal, stuck between pleasing those above and pleasing those below (Hallinger, 2003).

In Saskatchewan, schools are increasingly faced with assessment reform, complemented by regular pan-Canadian and provincial assessment initiatives. Saskatchewan recently added its own provincial assessment in 2006. This assessment reform creates conditions which challenge the traditional conceptions of leadership, and, coupled with public scrutiny, create significant tensions in the work of the principal. Until now, little research has been conducted on how the role of school principals has been affected. This paper describes a study of the perceptions that Saskatchewan school principals have regarding large-scale assessment reform and their perceptions of how assessment reform has affected their roles as principals.

Background to the Study: The Role of the Principal

The role of the principal has changed considerably since its formal inception in the early 1900s, shifting according to political eras and societal changes (Goodwin, et al., 2003). The principal's role did not exist in the one-room schoolhouse, as teachers performed all functions. As schools grew in size and bureaucracy increased, the role was officially recognized in the early 1900s as one of manager and coordinator of activities. The nature of the role varied

over time depending on social paradigm, politics, and the economy, but it was with the development of stronger, more vocal and active unions in the 1970s that the role of the principal shifted from “that of a colleague of teachers to a representative of the school board” (p. 5), and the years followed with increased centralization and increased bureaucracy (Tyack & Hansot, 1982).

Goodwin et al. (2005) reported that bureaucracy, social forces, collective bargaining, and other reforms eroded the instructional role of the principal so much so that principals used to consider themselves educators, but now “the problem is much too complicated, the organization much too vast, the ramifications are too great, the partners in the enterprise are too many for [principals] to serve any longer as educators” (p. 5).

Over the past two decades however, as accountability reforms have made their way into schools, there is formidable pressure for the principal to take on less of a managerial role in favour of instructional leader. Having been outside the instructional realm for some time, re-engaging in instruction and, furthermore, in improving the instructional performance of others presents a significant challenge for principals (Hallinger, 2003; Stronge, 1993): so much of a challenge that the shift from principal as manager to principal as instructional leader has not yet been effectively made. Instructional leadership in schools continues to be a challenge today firstly due to its narrow definition cast against the large number of roles of the principalship. Stronge (1993) stated that because the job entails a large component of managerial duties and demands, instructional leadership is difficult to achieve. Some of these demands of the principalship have been created by social forces and others by policy issues (Goodwin et al., 2003), but they have all resulted in “leadership issues including the layering of additional responsibility without corresponding authority, an imbalance between management and

leadership despite the expansion of the work week, an increase in ambiguity and complexity, and declining morale and enthusiasm” (p. 8). In addition, the role of the principal is further extended because different factions of society expect different outcomes from schools, calling principals to be responsive to multiple demands (Catano & Stronge, 2007; Cuban, 1984). Secondly, the limited proliferation of instructional leadership may be due to the limited empirical evidence that instructional leadership brings about improved student learning (Cuban, 1984; Hallinger, 2008). From a student perspective, school leadership accounts for only 12–25% of student learning outcomes (Leithwood, 2012), while external environment and family-related factors can account for as much as 50% of the effects on student achievement (Leithwood et al., 2010). The demands of the role of the principal, the influx of large-scale assessment, and the evolution of leadership theory and research call to question how assessment reform has affected principals’ perceptions of their roles in schools.

Theoretical Framework

Creating an organizational culture and infrastructure that support a learning organization appears to require principals to have a different set of leadership skills than has previously been necessary (R. D. Goddard & Miller, 2010). A look at leadership theory for today’s principals reveals that concepts of instructional, transformational, and assessment leadership have made their way to the forefront in school leadership literature over the past two decades (J. Goddard, 2003; Hallinger, 2003), and it is assumed that, if principals reduce traditional leadership approaches in favour of instructional and transformational leadership conceptions, student learning will improve. This section explores this theoretical framework more fully.

The term instructional leadership has been prevalent in educational leadership literature for the past two decades (J. Goddard, 2003; R. D. Goddard & Miller, 2010; Southworth, 2002). Despite this longevity, it is frequently used interchangeably with other leadership terms, such as distributed leadership and transformational leadership. In his research on studies of instructional leadership, Hallinger (2008) found that, despite school restructuring and reform, the instructional leadership construct has maintained a consistent stronghold in leadership literature. As a result, instructional leadership is held as the model for emulation by school leaders for its part in monitoring, mentoring, and modelling, and for its promise to improve school performance. The instructional leadership framework (Hallinger & Murphy, 1985) consists of three main components: a) defining the school mission, b) managing the instructional program, and c) creating a positive school climate. Within these components, the instructional leader frames school goals, communicates, supervises and coordinates curriculum, monitors progress, and supports the learning culture through visibility, protecting instructional time, and providing professional development opportunities for teachers.

The term instructional leadership characterizes the collegial practice of working together to improve the quality of teaching and learning (Hopkins, 2001). Day et al. (2007) identified that setting directions, developing people, engaging in collaboration, and using data and research as indicators of the effectiveness of teaching and learning are primary components of instructional leadership. Day et al. further identified that the most effective practices within instructional leadership components were encouraging the use of data and research and aligning resources to support working with data. In addition, a large component of instructional leadership is modeling, mentoring, and monitoring (Southworth, 2009) and assumes that the principal can model effective instruction, lead others to understand effective instruction,

recognize effective instruction when it occurs, and understand the outputs of effective instruction. Moreover, monitoring (of student performance data) is required for an informed leader to maintain awareness of students' learning, progress, and achievements. As Southworth pointed out, "data are not an additional part of the work, as if they were an appendage to the teaching process to be consulted when there is time; they are an integral part of leadership and teaching" (p. 96).

Southworth (2009) identified instructional leadership as learning centered leadership. He thought school leadership is (and must be) primarily about teaching and learning and asserted that leadership becomes "more potent when it focuses on developing students' learning and strengthening teaching" (p. 93). Knowing that learning is constructive, instructional leaders can emphasize the importance of talking about teaching and learning and engage in dialogue as learners. These dialogues describe and analyze what works in the classrooms, what doesn't work, and what strategies are needed to achieve success. Such dialogue brings to the forefront assumptions about teaching and learning and forces the teacher to come to terms with successes and challenges. Instructional leadership requires that leaders understand teaching, learning, and assessment within their schools and that their leadership entails the strategies to effect improvement.

There are several criticisms of the instructional leadership model. One is that it is hierarchical in nature. There is a top-down relationship between the principal and the teachers, as the principal takes on the role of curriculum expert and supervisor of curriculum and instruction (J. Goddard, 2003). A second criticism is that even if a principal is engaged in instructional leadership, one principal could not be capable of being a curriculum expert in all areas (Hallinger, 2003). Thirdly, because of the fragmented role of the principal, a principal would not

have the time to effectively engage in instructional leadership without committing significant time off the clock (Cuban, 1984; Hallinger, 2003). For these simple reasons, among others, the concepts of distributed and transformational leadership have evolved.

Transformational leadership first appeared in leadership literature in the early 90s in response to the hierarchical, supervisory nature of instructional leadership (Leithwood, 1992). Recognizing leadership at the school level must be shared and flat, the transformational leader works in concert with other teachers, and through collaboration, rather than “coordinating and controlling” (Hallinger, 2003, p. 337), the school can more easily work towards its goals.

Transformational leadership consists of these elements: individualized support; vision and shared goals; culture building and intellectual stimulation; and modeling, maintaining high expectations, and providing rewards. Moreover, transformational leadership incorporates concepts of shared and distributed leadership (Spillane, 2006) through its emphasis on bottom-up change. Inherent in transformational leadership is the notion that the principal is able to create a shared vision within the school and community, maintain high expectations of student learning, and provide opportunities for professional development and intellectual stimulation.

Transformational leadership deviates from instructional leadership in that the concept itself, transformational leadership, dismisses transactional leadership entailing a comply–reward exchange in order to achieve deep, transformational change in teachers (Leithwood, 2007). Lastly, related to the previous point, transformational leadership incorporates the concepts of second order change (J. Goddard, 2003; Hallinger, 2003). Second order change involves building capacity in others to create change. It creates more do-ers rather than followers through its effect on group goals and motivation. As opposed to first order change, that which results directly from the principal’s actions directly influencing teaching and learning, second order change abandons

direct supervision in order to achieve deep seated change in people. One could say that transformational leadership involves a systems thinking approach rather than a more linear, instructional leadership approach. In transformational leadership it's not simply the actions of the principal that matter; it's the direct and indirect consequences of those actions on the organizational system that are the focus.

Criticisms of transformational leadership include an even more challenging task of determining the effects of such leadership on student learning, as variables to second order change are numerous and difficult to isolate. Secondly, studies in this area have so far included affective aspects such as perceptions and student engagement rather than the direct effects on student learning outcomes (Hallinger, 2003).

Assessment leadership, as defined by Noonan and Renihan (2006), is part of instructional leadership. Specifically, it is the practice of focusing on learning and the accomplishment of learning rather than on teaching and the supervision of teaching. Assessment leadership involves the creation of greater knowledge and capacity to utilize large-scale assessments as well as teacher-made assessments to determine levels of student learning attained. Assessment leadership also carries with it the notion of accountability, where the information gained from assessments is not only fed back to the schools, but also to the communities and public. Dinham (2005) revealed that exceptional principals are those who are assessment literate and can move from being focused on teachers and teaching to being "focused on the students and their learning" (p. 343). Through assessment leadership, a principal takes the opportunity to develop into a "learning leader" (Crow, Hausman, & Scribner, 2002). Assessment leadership also includes a basic understanding of the competencies of assessment so that a principal can hire

and evaluate appropriately (Arter, Stiggins, Duke, & Sagor, 1993; Brewer, 1993), as well as participate in professional development initiatives along with staff.

Assessment leadership means not only knowing what has to happen, but how to make it happen. “Principals must be sufficiently assessment literate to fulfill these growing responsibilities” (Stiggins & Duke, 2008, p. 291). Copland (2001) suggested assessment leadership works at targeting old functions of the managing principal and replacing them with those related to teaching and learning. This includes exhibiting competencies of assessment leadership, taking account not only of policy and application of policy, but how to initiate collaboration around assessment goals, how to recognize and enlist teacher assessment competency, how to build teacher assessment capacities, how to accurately interpret and use assessments, and how to confidently communicate assessment information (Arter et al., 1993; Stiggins & Duke, 2008).

As a result of changes in the expectations of schools, principals, who have traditionally maintained positions as organizational managers, are now expected to be instructional leaders. A significant part of the role of instructional leader—along with framing school goals, supervising and coordinating curriculum, monitoring progress, and supporting the learning culture, among others—is that of assessment leader, necessitating that the principal combines knowledge of assessment literacy with the ability to engage others in such literacy through professional development opportunities.

Large-Scale Assessment in the Saskatchewan Context

Standardized assessments in Saskatchewan are situated within a provincial accountability framework, the Continuous Improvement Framework (CIF), launched in 2005.

The CIF goal is to improve student learning by aligning goals within the education system with strategies, supports, and measurable outcomes (Saskatchewan Ministry of Education, 2008). The CIF outlines four provincial priorities as the focus of all school divisions: higher literacy and achievement, equitable opportunities for all learners, smooth transitions throughout the system and beyond, and system accountability and governance. One of the expectations of the CIF is each school must create a yearly plan targeting goals within the four priorities. The results of these goals are reported to the school division and the division amalgamates the outcomes in a report to the Ministry, which summarizes the results of the division as a whole.

Saskatchewan participates in three types of large-scale national and international assessments including: a) the Pan-Canadian Assessment Program (PCAP) since 2007, which measures math, reading, and science outcomes for the purpose of examining curriculum related accomplishment; b) the Program for International Student Assessment (PISA), which examines the outcomes of 15-year-olds for the purpose of comparing Organization for Economic Co-operation and Development (OECD) member countries; and c) the Progress in International Reading Literacy Study (PIRLS), which originated in the United States and measures reading skills of fourth grade students (Saskatchewan Ministry of Education, 2007). The PCAP and PISA assessments are conducted yearly, while the PIRLS assessment has only been administered twice (in 2001 and 2006).

Saskatchewan also introduced the Assessment for Learning (AFL) program, a provincial assessment program with these goals: improving the level of student achievement in math, reading, and writing; strengthening school divisions' capacity to use data and to report to the public; supporting the development of professional learning communities; and raising educators' and administrators' level of assessment literacy. Although piloted in earlier years, the

AFL was launched province-wide from 2009–2012, focusing on one target area (math, reading, or writing) per year. In comparison to international and national tests, provincial assessments are more closely aligned with the required provincial curriculum. These curriculum-referenced assessments were designed to provide a more accurate picture of student learning (according to targeted outcomes and indicators) compared to other norm-referenced pan-Canadian assessments.

Research Methodology

This study examined the perceptions of Saskatchewan principals regarding large-scale assessment reform and their perceptions of how assessment reform has affected their roles as principal. The questions were designed to determine a) how large-scale assessments affect the role of principal, b) how assessments influence teaching and learning in the school, and c) what principals believe are the best ways to improve student assessment scores.

Data Collection and Analysis

This study utilized a survey instrument, developed by Ulmer (2002) and adapted for use in Canadian schools for the qualitative portion of this study. This survey was field tested by Saskatchewan teachers, principals and vice principals, and university colleagues to ensure the questions were clear, useful, and appropriate. Participating school principals received and returned completed surveys by mail. Five school jurisdictions, two rural and three urban, were approached to participate. Two hundred surveys were distributed and 90 surveys were returned. Over 50% of the principals in this study had five or fewer years of experience, about 30% had between 5 and 10 years of experience, and the remaining 20% had more than 10 years of

experience. Two thirds of the respondents were male. Responses included principals of elementary schools (44%), middle schools (12%), and high schools (36%). There were no significant differences between responses from male or female participants, as well as no significant differences between responses from principals with different years of experience based on chi-squared tests. This study was limited in that only 90 principals responded out of the 200 surveys distributed representing a sample of 90 out of approximately 700 principals in the province. This study was also limited by participants answering open-ended qualitative questions at the end of the survey; these responses were taken and analyzed without asking further questions, thus meaning could not be clarified. Although the survey contained both quantitative and qualitative questions, this paper examines the qualitative data.

Qualitative Data

The following is an initial presentation of participating principals' responses, summarized, but unanalyzed. The data addresses the three research questions: (a) how large-scale assessments affect the role of principal, (b) how assessments influence teaching and learning in the school, and (c) what principals believe are the best ways to improve student assessment scores. Analysis of this data occurs later in the discussion session.

How Are Large-Scale Assessment Pressures Affecting Your Role as Principal?

Respondents described how the pressure of large-scale assessment (PISA, PCAP, or the AFL in Saskatchewan) affected their role as principal. In total, 85 participants responded to this question. Responses fell into three basic themes: positively affected (45 responses), negatively affected (21 responses), and not affected at all (19 responses).

Forty-five respondents reported that large-scale assessment had affected their role as principal positively. Reported effects included positive pressures to improve teaching and learning, and resulted in an increased use of curriculum. Also reported was an increase in the understanding and use of data, a desire to set student learning goals at the school level, enriched discussion among staff, and improved instruction in the classroom.

Participants reported standardized assessments provided the catalyst to take a deeper look at curriculum indicators and outcomes, and to plan to improve upon those outcomes. Some principals thought that large-scale assessment was an opportunity to learn how to interpret data and align programming to target problem areas, that large-scale assessment catalyzed the use of more local assessments as pre and post tests to measure student learning, and that there was important learning involved. Within the responses were also suggestions that the data are forcing teachers to improve by teaching to students' weaknesses.

Those reporting negative effects to their role noted concerns for the additional administrative tasks added on to an already taxed workload for something that cannot be used to improve student learning. There was the perception of additional pressures from higher administration, a dislike for the inconvenience and irrelevance of testing, a lack of time to do testing, and a need to avoid being a bearer of bad news to staffs if results were poor.

The participant responses reporting no effect at all ranged from disinterest either for the assessments themselves or for the data that they produce. Some reported the data were examined but not used to effect any change at the school. Also reported was a simple tolerance for the inconvenience of collecting the data (rather than a pressure), including taking on the role of providing coverage during the administration of standardized assessments so as to minimise any

disruptions from the assessments within the school. A sample of responses to the question of how assessment pressures affected the role of principal is included in Table 1.

Table 1
How Large-Scale Assessment Pressures Affect Your Role as Principal: A Sample of Responses

Positively	<p>“They are having a positive impact by forcing us to look at curriculum, outcomes, and assessment practices, and to plan for improvement”</p> <p>“They help us prioritize our goals and programming objectives”</p> <p>“It helps me to influence direction of improvement initiatives in the school”</p> <p>“We use these results to set school goals and it guides our learning improvement plan”</p> <p>“The pressure is positive and provides opportunities to enrich our understanding of data and how to use it to create learning environments that support student success”</p> <p>“It has made us take more ownership for the student learning, assessment practices, and teaching strategies that happen in our building”</p> <p>“[I must] hold teachers responsible to do their best to help students be prepared for test situations”</p> <p>“The results are interesting to see and as an administrator I discuss results with staff, encouraging them to use testing information to inform them of areas of weakness”</p> <p>“[I have to] encourage students to take ownership of learning”</p> <p>“Teachers are really beginning to better understand the importance of teaching curriculum and using curriculum approved programs”</p> <p>“It has finally forced teachers to use data to teach to their students’ weaknesses”</p>
Negatively	<p>“I feel pressure from the school board if our results are low in an area”</p> <p>“The time spent on ‘extra assessments’ is stressful for my teachers”</p> <p>“They seem more like an inconvenience than an appropriate support mechanism for students/staff”</p> <p>“They cannot be used by staff to improve learning”</p> <p>“I am the bad guy in the eyes of the staff”</p> <p>“Teachers find them difficult to fit in and make relevant”</p>
Not at all	<p>“I have no use for them”</p> <p>“To date, we have scored well and have not felt any pressure to perform better”</p> <p>“I don’t see them as pressures but simply as tools that we need to make sure we are using appropriately”</p> <p>“I don’t feel any pressure as a result of the testing”</p>

How Have Provincial Assessments Influenced Teaching and Learning in Your School?

As mentioned previously, differing from international and national tests, provincial assessments are aligned with the required provincial curriculum. This curriculum alignment results in assessment data that provide a more accurate picture of student learning (according to targeted objectives) compared to other norm-referenced pan-Canadian assessments. Principals also indicated how provincial assessments have influenced teaching and learning in their schools. In total, 83 participants responded to this question. Responses again fell into three basic themes, being: positively affected (65 responses), negatively affected (4 responses), and not affected at all (14 responses).

A large majority of participants indicated provincial assessments positively influenced teaching and learning in their schools, recognizing the assessments as catalysts for positive changes in teaching. The assessments drove decision making, priority setting, planning, and instruction. Principals reported that assessments guided the provincial learning improvement plans and helped the staff set goals to drive learning improvement. Several participants mentioned they used this yearly data for benchmarking, indicating it provided them with individual student data that could be used for planning purposes. Principals reported that the assessments initiated discussion, collaboration, professional learning communities, and capacity at the schools. Respondents also acknowledged awareness that the provincial assessments were linked to provincial curriculum outcomes, therefore teaching to the curriculum meant they were preparing their students for the assessments.

Some principals also shared negative responses, noting that assessments were simply an inconvenience and not an appropriate mechanism for either students or staff. Even though one principal responded that they try to set their goals based on data, the assessments themselves had

no influence. There was a report that the assessments created a demotivating effect—that is, the assessments simply confirmed something staff already knew, which is that their students were scoring well below where they ought to be. Also reported was that the assessments were causing teachers to want to “teach to the test.” Finally, some principals briefly stated that provincial assessments had no influence on teaching and learning at the school. Table 2 includes a selection of responses to the question of how the provincial assessments influenced teaching and learning at the school.

Table 2
*How Provincial Assessments Have Influenced Teaching and Learning in the School:
 A Sample of Responses*

Positively	<p>“The assessments are very influential, resulting in greater assessment literacy and data analysis of assessment directs decisions regarding teaching strategies and our learning improvement plan”</p> <p>“We talk more about why we are doing this”</p> <p>“Teachers are more aware of outcomes”</p> <p>“Teachers are becoming more intentional in their planning”</p> <p>“The [data] must be used with other data to help improve instruction”</p> <p>“They make us take more ownership for student learning, assessment practices, and teaching strategies that happen in our building”</p> <p>“The collaboration to adjust instruction has increased teacher enthusiasm and built capacity to understand the bigger picture”</p> <p>“The tests provide us with evidence that different teaching methods are working”</p> <p>“It reminds teachers to teach to the curriculum”</p> <p>“It has increased accountability to teach to the curriculum”</p> <p>“We pay more attention to the curriculum rather than having ‘activities’ in the classroom”</p> <p>“It has raised awareness that people are asking us to be accountable”</p>
Negatively	<p>“It hasn’t changed the culture of teaching or attitude toward (assessments)”</p> <p>“For those that we are involved in, the results simply confirm what we already know—our students perform well below grade level”</p> <p>“Teachers have made comments that they are going to be teaching to the test”</p> <p>“The assessments cause us to teach <i>to</i> more than <i>for</i> the students”</p>
Not at all	<p>“Not at all”</p> <p>“Very little”</p> <p>“Not much but another piece of the assessment puzzle”</p> <p>“Up to this point, little”</p>

What Is the Best Way to Improve Your School's Test Scores?

Principals were asked what they thought was the best way to improve their students' test scores. There were 98 responses to this question (some respondents provided more than one response), divided into five themes: improvements in teachers and teaching (33 responses), increased collaboration among teachers in the school (35 responses), increased collaboration with parents and the home (12 responses), increased parent and student accountability (6 responses), and increased support from the ministry of education (12 responses).

The theme of increased collaboration among teachers in the school revealed principals' perceptions that if teachers worked together, they could share expertise among one another, develop goals for student learning, and collaboratively plan how they were going to be achieved. These responses included increased discussion about teaching, learning, and assessment, and increased collaboration around school goals and learning improvement plans. Such responses indicated the expertise to improve student learning existed within the school and could be accessed through collaboration and internal capacity building.

The second most common response, improvements in teachers and teaching, revealed perceptions that better teachers and improvements to classroom teaching practices would help improve test scores. Improved teaching would occur if there were additional professional development in specific areas, including learning different teaching strategies and improving assessment strategies. There were also perceptions that the problem was teachers lacked an understanding of curricula and assessment, pedagogy, and related strategies, calling for consultants to lead professional development sessions. These comments revealed the perception that if the teaching in their schools improved, then so would student learning and, thus, so would test scores. External professional development had a role in this improvement.

Thirdly, participants reported that improvements would come about through increased collaboration with parents and the home. This collaboration includes increased communication with parents about the learning program and how it can be supported, involving students and parents in decision making, and asking parents for input in determining student needs.

The fourth theme, increased parent and student accountability, included perceptions that the school was not centrally responsible for improvements to student learning, rather, parents and the students themselves were centrally responsible. Such responses included students taking more responsibility for student learning, improved parenting, and a call for a general improvement in parent and student attitudes.

The last theme includes responses that allocated the responsibility for improved student learning beyond the school and school community to the Ministry of Education, calling for smaller class sizes, increased contact hours, and fewer curriculum objectives. Table 3 summarizes a selection of responses to the question of how test scores could be improved.

The Best Ways to Improve the School's Test Scores: A Sample of Responses

Increased collaboration within the school	<p>“We must examine data collaboratively and work hard as members of the team”</p> <p>“We need time for teachers to work together to develop common strategies”</p> <p>“Have teachers share ideas”</p> <p>“Be a school that works collaboratively towards this goal”</p> <p>“We need to tie curriculum planning, outcomes, teaching, and assessment together”</p> <p>“We need a school team that works collaboratively towards this goal”</p> <p>“Collectively review results and forge a plan”</p> <p>“Empower teachers. Let them take the lead”</p> <p>“Support teachers to become more effective. Open and safe dialogue”</p>
Improvements in teachers and teaching	<p>“Hire the best teachers. Plain and simply”</p> <p>“We need teacher PD regarding assessment and time to understand new curricula outcomes and indicators”</p> <p>“We need to increase teacher pedagogy knowledge and motivation”</p> <p>“We need to improve the way various subjects are taught, delivered, learned”</p> <p>“There’s an assumption that we have results and we know how to ‘fix it’. That’s not necessarily true”</p> <p>“Training to principals on how to improve test scores and how to use the data”</p>
Increased collaboration with parents and the home	<p>“Work with students and parents to maximize success”</p> <p>“We need parent meetings to inform them of how to support student learning”</p> <p>“Have input of all stakeholders – students, parents, and staff”</p> <p>“Increase communication with staff and home”</p> <p>“Establish relationships with students and parents”</p>
Increased parent and student accountability	<p>“Improve student attitudes towards school and the importance of academic success”</p> <p>“We have to change the attitudes of the majority who don’t feel that they need to do any work outside of the classroom”</p> <p>“Get our parents to realize the importance of education. It starts in the home, not the school”</p> <p>“Get parents to spend time with children reading/writing, and less time travelling for a lot of activities. Less time with parents doing nothing. Making and getting parents to commit”</p>
Increased support from the ministry of education	<p>“We need more contact hours with students in basic subjects”</p> <p>“We need a bit more in teacher-time for students with PTR (pupil-teacher ratio)”</p> <p>“There must be less curriculum objectives”</p> <p>“Give us a little bit more in teacher-student time/PTR”</p>

The data in this section were organized according to the three research questions. With regard to large-scale assessments, over half of the principals who participated in the study perceived their role to be affected positively through an increased use of curriculum,

understanding of data, and improving goal setting, while the balance perceived no effect or a negative effect on their role. Increased anxiety, negative pressure, additional work, and meaningless assessment disruptions were reported.

Most respondents reported positive effects of provincial assessments on teaching and learning in the schools, noting improvements in instruction aligning to curriculum, increased priority setting, discussion, collaboration and strategy building resulting in changes in teaching. Of those reporting negative effects, inappropriateness of assessment tools and time consumption were the leading factors.

The best ways to improve test scores were reported to be through collaboration in the school and through improving teachers and teaching. Collaboration was perceived as primarily sharing knowledge and resources that already existed within the school, while improving teachers and teaching revealed perceptions that professional development would have to be acquired outside the school. Also noted was that improvement would result through increased collaboration with parents and students. Some principals, however, thought improvement in test scores would only happen through external changes, such as improved parenting in general, improved student ownership for learning, or improving school supports through increases in Ministry support such as lower pupil-teacher ratios and increased student contact hours.

The following section includes the findings, as well as a discussion and implications for theory, research, and practice.

Findings and Discussion

As previously stated, this study examined the perceptions of Saskatchewan principals regarding large-scale assessment reform and how this has affected their role as principal. To this end, this research has yielded two findings. The first is large-scale assessments, especially provincial assessments, have affected Saskatchewan principals more positively than negatively or not at all. The positive effect is due to both the assessments' influence on the role of the principal as instructional leader and the assessments' influence on improvements in teaching and learning in the school. The second finding is large-scale assessments appeared, in some cases, to have catalyzed the principals to move toward practices of instructional leadership, including goal setting, improving instructional practices, and measuring changes in student learning. Although related, these findings are discussed separately in more detail below.

The first finding, again, is large-scale assessments, especially provincial assessments, have affected the role of the principal in Saskatchewan more positively than negatively or not at all. These positive effects were noticed through an increased focus on goals, curriculum, and improvement. In relation to their role in the school, principals described being moved toward directing learning initiatives in the school. In reporting that the data helped them to influence direction, principals used inclusive terms such as *we* and *us* to describe a move away from a managerial role to that of an instructional leader. Responding that the pressures are positive suggests principals recognized an opportunity to engage teachers in understanding curriculum, and supporting this understanding through providing information and discussing results. Although not in perfect sync with the model of instructional leadership (Hallinger & Murphy, 1985), principals reported using assessment data to frame goals, become involved in instruction, and to monitor the progress. In total, 45 out of 90 respondents were comfortable with their role in using assessment data, revealing a recognition that data aren't simply an add-on to the work in

schools, but rather they are “an integral part of leadership and teaching” (Southworth, 2009, p. 96).

There was also evidence in the responses that most principals who responded to this study had initial understandings of the practice of instructional leadership, assessment leadership, and, in some cases, transformational leadership. In responding to how the assessments influenced teaching and learning in the school, 65 out of 83 participants reported a positive influence. Again, using inclusive language, many principals testified to being more aware of curricular outcomes, talking more about instruction, and experiencing an overall increase in accountability. Increased discussion and collaboration were reported, and, although it is unclear whether or not the principal was always involved in the collaboration, there is clear evidence the principals recognized collaboration as key both in reports of how teaching and learning were influenced as a result of the assessments, and even more so in their recognition of what was required to improve the school's test scores. As Southworth (2009) contended, instructional leadership is learning centered leadership, where leaders recognize learning is constructive and it improves through dialogue and collaboration. Reports of a focus on learning and outcomes rather than a focus on the supervision of teachers (Noonan & Renihan, 2006) revealed aspects of assessment leadership. The statements that *the tests provide us with evidence that different teaching methods are working*, and that *we pay more attention to curriculum rather than “activities” in the classroom*, revealed developments of, as Crow et al. (2002) suggested, a learning leader, capable of leading assessment learning for staff. Lastly, transformational leadership traits were evident in some responses, such as allowing teachers to take the lead, and supporting teachers through open and safe dialogue as members of a team. Understanding that expertise exists within the teachers

in the school speaks to transformational leadership theory in that leadership is distributed, flat, and shared (Hallinger, 2003).

Strongly related, the second finding of this study is that the large-scale assessments were potentially the catalysts for the development of instructional leadership. Although it is unknown whether or not the principals in this study practiced instructional leadership prior to provincial assessment reforms, it is evident from their responses that the assessments had a role to play in the advancement of instructional leadership practices. The admonition that *the assessments remind us to teach to the curriculum*, or that *the assessments made us take more ownership for the student learning, assessment practices, and teaching strategies that happen in our building* reveal the assessments caused the change, acting as a catalyst. Further evidence for this existed in the statements that *it has finally forced teachers to use data*, and that *teachers are becoming more intentional in their planning*, and that *the data have increased teacher collaboration*. Although one can only make inferences as to the purposes of large-scale assessments, one positive outcome revealed in this study is that indeed, the assessments appear to have catalyzed improvements in teaching by improving teacher practice rather than simply causing teachers to teach to the test.

Not all principals reported positive effects. This study showed that 40 out of 85 principals perceived no effect or negative effects in their role as a principal as a result of large-scale assessments, and that 18 out of 83 respondents reported no effect or negative effects from large-scale assessments to teaching and learning in their schools. All 18 of principals who reported no effect or negative effects from large-scale assessments to teaching and learning in their schools were found within the group of 40 principals who perceived no effect or negative effects in their role as a principal as a result of large-scale assessments. Although further data

were not collected, this means that the other 22 respondents perceived a negative effect to their role as principal but a positive influence to teaching and learning in the school. This may reveal principals recognize benefits of large-scale assessments to teaching and learning in the school whether or not the principal is involved as an instructional leader; further research must be conducted to determine if this is true. Other negative or no-effect responses could reveal a lack of understanding of how to use assessment data to improve instruction, or a resistance to adopting a new approach to the leadership role. Paradigm shifts take time (Kuhn, 1959), so perhaps this resistance to change is only temporary. Encouraging news for proponents of instructional leadership is that this study reveals the numbers of school leaders perceiving positive influences from large-scale assessments have outnumbered those that do not, potentially leading to improved teaching and learning in the province. Perhaps however, as one respondent noted, it is the assumption that school leaders know how to best use assessment results, when this is not the case. As Elmore (2005) stated, “there are good reasons why school leaders often are discouraged by changes in their work conditions due to performance-based accountability. They are being asked to do something that they do not know how to do” (p. 140). Leading schools in an era of accountability reform requires not only an understanding of data and how to interpret data, but a working knowledge of change and an understanding of how learning takes place among teachers.

Conclusion and Implications

Large-scale assessments have affected the principal in Saskatchewan more positively than negatively or not at all. Specifically, large-scale, norm-referenced assessments appeared to be evenly valued, however, provincial curriculum-based assessments were more often perceived

positively, and in some cases, appear to have catalyzed the principals to move toward practices of instructional leadership. Among challenges to the positive effects of large-scale or provincial assessment, however, is that some principals have still not altered their practice to take advantage of the positive effects of the reform.

As a result, there are several implications to this study for theory, research, and practice. This study revealed the interesting finding that large-scale assessments, specifically the provincial curriculum-based assessments were initiating the practices of instructional leadership in schools. This is likely due to the provincial assessments' relevance to curricular content. Whether or not principals were aware they were engaging in instructional leadership, they were engaging in its practice, and they were calling upon themselves to do it. This provides an interesting theoretical lens from which to view instructional leadership in that the practice can engage the theory.

Principals in this study responded to large-scale assessment in different ways. Some responded by using the assessment to improve practice, some responded by empowering teachers to do the same, and others responded by buffering their staffs from the change. Although there is likely a wide range of variables as to why some principals resisted while others did not, it would be interesting to determine what fueled principals' motivations to adopt or resist large-scale assessment initiatives. It is fair to speculate that the more relevant the assessment is to curriculum, the more receptive principals are to seeing the benefits of large-scale provincial assessments and using them to improve teaching and learning in their schools.

Research and practice indicates instructional leadership focused on student learning outcomes results in student success (Crum & Sherman, 2008; Dinham, 2005; Leithwood & Jantzi, 2008; Southworth, 2009). The different responses from principals in this study revealed

that, although there appears to be some assessment leadership capacity in the province, it is not consistent or certain, and further revealed there is still a lot of work to be done in order for the province to benefit from assessment reform. And rightly so, as using assessments to benefit teaching and learning “is a different kind of work. It requires different knowledge and skills, and it entails different norms and expectations” (Elmore, 2005, p. 140). As a result, school leaders have to gain knowledge on how to improve their schools at the same time as the policy is implemented. “It must be recognized, of course, that a collaborative and professional school culture will not arise from the ashes of current practice without a major influx of resources” (J. Goddard, 2003, p. 19). Time must be allocated to principals so that they can maintain their other responsibilities and still fulfill the role of instructional leader. It is both important and valuable that large-scale assessment initiatives be coupled with leadership professional development for principals. Whether this professional development is focused on instructional leadership, transformational leadership, assessment leadership, or a combination, it may provide necessary theoretical knowledge that would allow principals to understand the changes that must take place in their schools in order to benefit from potential improvements from large-scale assessments. Targeted professional development that accompanies large-scale assessment initiatives may also help principals relate their work to the theories, providing them with further direction and motivation.

Leadership must be about competence in instruction and assessment, and the effective use of both in order to serve our students (Stiggins & Duke, 2008), including being assessment-literate themselves. This implies leadership learning not only how to interpret data, but learning how to proceed to effect school change and improvement, learning how teachers learn, learning how to model, dialogue, and collaborate, and how to sustain improvement. This type of

leadership is challenging, in that it strays from the traditional conceptions of leadership. Nonetheless, this new leadership is necessary if the province is going to successfully use accountability practices to improve student learning.

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