Instructional supervision and instructional strategies: A comparative analysis of P1 and P2 primary schools in Gweru urban, Zimbabwe.

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The study sought to compare instructional supervision and instructional strategies between P1 and P2 primary schools in Gweru urban schools. An explanatory sequential design was used. Two schools from each school type were randomly selected. A total of 11 grade 7 teachers from each school type and four head-teachers volunteered to participate. The results show that instructional supervision in P1 schools had higher scores (M = 37.36, SD = 60.72) than P2 schools (M = 26.73, SD = 3.74), t(20) = 6.38, p < 0.01, two tailed. The size of this effect was large (effect size r = 0.67). Head-teachers’ comments indicated that they focus more on administrative roles such as school finances while their deputies’ carter for supervision. On instructional supervision, P1 schools had higher scores (M = 24.10, SD = 8.40) than P2 schools (M = 17.60, SD = 4.77), t(18) = 2.18, p < 0.01, two tailed. Both school types indicated that students’ learning preferences did not match their teachers’ teaching styles.

KEYWORDS
streaming, instructional leadership, teaching style,

Introduction
The purpose of the study is to compare instructional supervision and instructional strategies between P1 and P2 primary schools in Gweru urban schools. P1 (former group A primary) government schools are located in former European affluent suburbs and were superior in terms of resources and trained teachers and are high fee paying. Access to such schools is based on residence. Hence, only those African pupils with high socioeconomic status parents and lived in former white suburbs could enrol in P1 (former group A) schools (Nyagura, 1991; Nkoma, 2013). P2 (former group B) primary schools are low fee paying government schools located in African residential areas (high density similar to inner-city areas) and exclusively patronized by Black children (Nkoma and Mapfuno, 2013).

The Zimbabwe Education act of 1996 indicates that the education system follows a 7+4+2+4 standard model of education. That is 7 years primary education, with children starting grade 1 at age 6 and completing grade 7 by the age 12; 4 years secondary education (form 1 to 4), followed by 2 years of high school (form 5 to 6) and 4 years university education (Education Act, 1996 cited by Nkoma, 2013). There is automatic promotion from grade 1 to form 4, and children repeat a grade/form at parental request. The academic year in Zimbabwe runs from January to December, with three month terms, broken up by one month holidays, with a total of 40 weeks of school per year.

The lead researcher has been an Educational Psychologist in The Ministry of Primary and Secondary and has noted that qualification and experience of teachers is currently equally distributed between P1 and P2 schools as teachers change schools to teach in areas closest to their residential areas while head-teachers are chosen to head P1 schools because of their previous outstanding achievements in Rural or P2 schools. Teacher incentives which have been higher in P1 than P2 schools were scrapped in 2014 because it had been fraught with a number of challenges such as uneven distribution, abuse, protests, litigations, inter alia, leading to disharmony among teachers and poor service delivery in the entire ministry (Daily News 27 August 2014).

Most P1 schools in Gweru are achieving better at grade 7 levels as exemplified by the table 1 below.

Table 1: Grade seven pass rate in P1 and P2 schools from 2012 to 2014

<table>
<thead>
<tr>
<th>Year</th>
<th>P1</th>
<th>P2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>School name</td>
<td>Pass rate</td>
</tr>
<tr>
<td>2012</td>
<td>Young</td>
<td>97.32</td>
</tr>
<tr>
<td>2013</td>
<td>45.60</td>
<td>99.37</td>
</tr>
<tr>
<td>2014</td>
<td>95.31</td>
<td>98.10</td>
</tr>
</tbody>
</table>


Grade 7 examinations are not terminal like ‘O’ and ‘A’ level examinations. The seven years of primary schooling culminate in four nationally-set Grade 7 examinations in Mathematics, English, Shona or Ndebele and Content, which is a combination of sciences and social sciences. The scores are graded on a scale that stretches from Grade 1 (the best) to Grade 9 (the least). While the concept of passing or failing does not apply at this level, performance is judged on the basis of units a candidate scores. An aggregate of up to 24 units from all the four subjects (four subjects x 6) is regarded as qualitative performance. Quality of performance is also indicated by the number of subjects in which a candidate obtains a grading of 1 to 6 units.

Supervision, teaching, and learning are major components of this educational system (Montgomery, 1999). Without these components the educational system may not be effective. Glickman, Gordon, and Ross-Gordon (2001) suggest that blame for lack of student learning could be placed on teachers and their teaching techniques. Thus, the teacher’s role is to facilitate and promote learning.

Conti (2004) defines the term teaching style as the distinct qualities exhibited by a teacher that are consistent from situation to situation regardless of the content being taught. Thus, a teaching style is made up of a range of behaviors that a teacher comfortably used consistently over time, situation, and content (Elliot, 1996).

Two fundamental teaching styles are, 1) a controlling teacher centered and 2) a responsive, collaborative, student/learner centered (Conti, 1989). Dupin-Bryant (2004) defines learner-centered teaching style as “a style of instruction that is responsive, collaborative, problem-centered, and democratic in which both students and the instructor decide how, what,
and when learning occurs” (p.42). Learner-centered learning environments recognizes that the prior knowledge of learners influences future learning and thus learning needs to be built on this. Assessment an integral part of learner centered approach which provides opportunities for feedback and improvements throughout the learning process (Nicol and Macfarlane-Dick, 2006) resulting in evaluation and judgment at the end of the learning process. For this to occur there is need for congruence between learning goals and what assessed (National Research Council, 1999).

On the other hand, teacher-centered teaching style is considered as “a style of instruction that is formal, controlled, and autocratic in which the instructor directs how, what, and when students learn” (Dupin-Bryant, 2004 p.42). This teacher-centered learning is described by Huba and Freed (2000) as students who passively receive information with emphasis on acquisition of knowledge while the teacher's role is to be the primary information giver and evaluator. Thus, this approach has no room for student's personal growth because students are viewed as 'empty vessels' and the teachers as the provider information. This form of teaching style is common in Zimbabwean schools (Nkoma, 2014). Research supports the concept that most teachers teach the way they learnt (Stitt-Gohdes 2001, p. 136). Since many teachers experienced academic success in learning environments that were teacher centered and relied heavily on lecture, it therefore follows that their preferred style of teaching, at least initially, would be to repeat 'what worked with them.' Such teachers are more content oriented and prefer to use more formal teaching methods, favoring less student involvement and more structured class activities (Hayes and Allinson 1997; Pithers 2001). Such a style works well for field-dependent students who want to be told what they should learn and given the resources to acquire the specified body of knowledge or skills.

The primary school curriculum in Zimbabwe recognizes that for the child to be an active agent in learning (encouraging the child to respond in a variety of ways to particular content and teaching strategies), and that his or her existing knowledge and environmental experience should be the starting point of new knowledge and thus, it follows that the quality of teaching determines the success of student learning and development in school (Nkoma, 2014). Instructional approaches need to be varied to take into cognizance diverse learners in the classroom. Such students have individual learning styles with one dominate style. The general styles are visual/spatial (preferring to see information), auditory (like to hear information) and kinesthetic (preferring physical involvement such as touching, doing and feeling with their learning).

There is no policy on streaming at primary school level in Zimbabwe (Nkoma, 2014) and hence some primary schools might stream while others do not. However, research indicates that mixed ability teaching tends to be more effective for middle and lower ability pupils (Devine 2000, Lynch 1989). Though, head-teachers, teachers and parents might view streaming as important to ensure that most teachers teach the way they learnt (Stitt-Gohdes 2001, p. 136). Since many teachers experienced academic success in learning environments that were teacher centered and relied heavily on lecture, it therefore follows that their preferred style of teaching, at least initially, would be to repeat 'what worked with them.' Such teachers are more content oriented and prefer to use more formal teaching methods, favoring less student involvement and more structured class activities (Hayes and Allinson 1997; Pithers 2001). Such a style works well for field-dependent students who want to be told what they should learn and given the resources to acquire the specified body of knowledge or skills.

The approach taken to students learning determines the extent to which they retain what they learn. According to the NTL Institute (2000), the percentage of learning retained through various approaches is as follows:

- 5% - lecture.
- 10% - reading.
- 15% - visual arts.
- 30% - demonstrations.
- 50% - small group work.
- 75% - experimental work.
- 90% - peer tutoring.

Thus, suggesting that collaborative methods of teaching are the most effective.

Instructional leadership has been drawn from the effective schools literature (e.g. Andrews & Soder, 1987; Hallinger & Murphy, 1986). Effective instructional leaders are intensely involved in curricular and instructional issues that directly affect student achievement (Cotton, 2003). To ensure academic achievement (Heck, 1992), principals generally assume instructional responsibilities, such as coordinating and supervising instruction, monitoring student learning, and supporting teacher development (Hallinger, 2003; Hallinger and Murphy 1986; Murphy et al., 1983) with less emphasis on managerial tasks. Thus, principals who effectively perform their instructional responsibilities with the aim of improving student achievement are called ‘instructional leaders.’ Rather than being bureaucratic, the instructional leader needs to be open to innovations and feeling comfortable with distributing leadership among staff.

The model of instructional leadership proposes three dimensions of the instructional leadership construct: defining the school’s mission, managing the instructional program, and promoting a positive school-learning climate (Hallinger, 2000). In current practice, however, principals have been expected to share their leadership responsibilities with teachers and collaborate with them on curriculum, instruction, and assessment in order to enhance the quality of teaching and learning (Marks and Brink, 2003). In addition, one of the main responsibilities of today’s instructional leaders is gathering data on student achievement, and analyzing and using it to improve teaching and learning in schools (King, 2002).

Defining the school’s mission comprises of two functions: firstly framing the school’s goals and secondly communicating these goals to staff. The school head’s role is to ensure that the school has clear, measurable goals that focus on academic progress of students. The school head’s responsibility is to ensure that these goals are known and supported by school community. The school head may define the goals in consultation with teachers.

The second dimension, which entails managing the instructional program, focuses on the coordination and control of instruction and curriculum. The dimension incorporates three leadership functions: supervising and evaluating instruction, coordinating the curriculum, monitoring student progress. These functions require the leader to be deeply engaged in the school’s instructional development.

The third dimension, promoting a positive school learning climate, includes the following functions: protecting instructional time, promoting professional development, maintaining high visibility, providing incentives for teachers, providing incentives for learning. The dimension emphasizes the development of high standards and expectations and a culture of continuous improvement.

Research on student school achievements supports the view that when students’ learning preferences match their teachers’ teaching styles, student motivation and achievement usually improve (Miller 2001; Stitt-Gohdes 2003).

**Purpose of study**

Performance at grade 7 in Zimbabwe is being dominated by P1 schools in urban areas despite the equivalent teacher qualification and experience with P2 schools. Most schools (inclusive of P1 and P2) experienced shortages of core textbooks between 2008 and 2010 and 99% of Primary schools registered with the Ministry of Primary and secondary Education received a set of core books by 2011 (Nkoma, 2014). This makes it necessary to find out if teaching strategies by teachers and instructional supervision by head-teachers differs by school type which might account for performance differences.

**Hypotheses**

There are no significant differences between school type and instructional supervision.
There are no significant differences between school type and instructional strategies.

Research questions
What are the most frequently used instructional strategies by teachers and school type?

What are the teachers’ views of instructional leadership by school type?

Research Methodology
Research design
The explanatory sequential design (Teddie & Tashakkori, 2009) is the most appropriate research design in this study as the overall purpose of this design is to use a qualitative strand to explain initial quantitative results. Quantitative analysis of instructional supervision and instructional strategies by teachers’ responses would be followed by in-depth interviews of head-teachers and teachers.

Sampling and sampling method
Grade seven teachers were purposively selected from P1 and P2 primary schools in Gweru. Two primary schools from each school type were randomly selected while grade seven teachers who volunteered participated in the study. A total of 11 teachers from each school type and four head-teachers participated. Two teachers (one from each school type) withdrew from the study and hence failed to complete the instructional strategies questionnaire, thus leaving a total of ten teachers.

Research instruments
Two structured questionnaires for teachers were designed to capture information on instructional supervision and their instructional strategies.

The questionnaire on instructional supervision was based on the five practices central to effective leadership (Wallace Foundation, 2012; Van Deventer and Kruger, 2003). Measures of instructional supervision were obtained from a 27 item survey structured in a five point likert scale for teachers as follows (dimensions): teachers’ views on school vision (items 1-3), climate hospitable to education (items 4-11), cultivating leadership in others (items 12 – 13) and improving instruction (items 14-24) and monitoring learner progress (items 25 to 27). Each item was rated on a 5-point frequency scale in which the scale extremes were described as strongly agrees (5) to strongly disagree (1). This instrument was given to three experts in the field for screening and evaluation and content validity was affirmed.

The instructional strategies questionnaire designed from literature focused on in-class activities with 10 questions on a three point scale from always, sometimes, never. Each instructional strategy had a brief description. For example the questions focused on direct teaching, cooperative learning, peer tutoring, small group work and experimental work.

In-depth questions focused for head-teachers views on their instructional supervision while that for teachers concerned the frequently used instructional strategy.

Data analysis
Teachers’ responses on instructional supervision and instructional strategies by school type were analyzed using t-tests for independent samples.

Results
The first hypothesis states that there are no significant differences between school type and instructional supervision.

The results show that instructional supervision in P1 schools had higher scores (M = 37.36, SD = 60.72) than P2 schools (M = 26.73, SD = 3.74), t (20) = 6.38, p < 0.01, two tailed. The size of this effect was large (effect size r = 0.67).

In-depth interviews from head-teachers in P2 schools indicated that class supervision is done once per term per teacher and teachers are informed in advance on when the supervision is done. Head-teachers commented that they have one-on-one discussions with teachers to try and improve classroom teaching practices but this is not done soon after supervision. The head-teachers in both school types focus more on administrative roles such as school finances with little teaching while their deputies’ career for supervision. However head-teachers in P1 schools indicated that they monitor learner progress by inspecting students’ progress record books and doing counseling on students they see as regressing academically. Targets for grade 7 teachers depended on the streams. Upper stream teachers had higher targets than lower streams and these were more specific and agreed upon by teachers. In P2 schools targets were vague for teachers (for example, to increase pass rates from last year’s results). Both types of schools indicated that they lack training in instructional supervision.

The second hypothesis states that there are no significant differences between school type and instructional strategies.

Table 3: Means and variances of Instructional strategies in P1 and P2 schools

<table>
<thead>
<tr>
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<th>P1</th>
<th>P2</th>
<th>df</th>
<th>t-value</th>
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<tbody>
<tr>
<td>Mean (M)</td>
<td>24.10</td>
<td>17.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>8.40</td>
<td>4.77</td>
<td>18</td>
<td>21.28**</td>
</tr>
<tr>
<td>Sample size</td>
<td>10</td>
<td>10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Significant at 0.01

The results show that instructional supervision in P1 schools had higher scores (M = 24.10, SD = 8.40) than P2 schools (M = 17.60, SD = 4.77), t (18) = 21.28, p < 0.01, two tailed. In-depth interviews with teachers indicated that there is streaming in both school types. P2 school teacher comments indicated that they preferred the lecture method that is the teacher centered approach. Though the teachers indicated within class ability groups for mathematics and reading, they had minor adjustments to course content for ability. Both school types indicated that students’ learning preferences did not match their teachers’ teaching styles. Teachers in P1 schools did within class ability groupings but emphasized competitive learning at the expense of cooperative learning. Teacher demonstrations and small group work was emphasized in P1 schools. P2 schools indicated that there is less mixed ability peer tutoring because this results in high noise levels and hence lose direct control of the class while P1 schools emphasized same ability and mixed ability peer tutoring. P2 school teachers indicated that large class sizes (teacher-pupil ratios of 1: 60) makes it difficult to complete the syllabus for these examination candidates using the active learning exercises. Focus is more on examination teaching strategies.

Discussion
The results show significant differences in instructional supervision between P1 and P2 schools with higher scores in P1 schools. Infrrequent supervision by head-teachers was attributed to their administrative roles and little time on teaching. Academic targets for P1 schools were more specific and agreed upon by teachers than in P2 schools. Head-teachers view themselves as administrators and not instructional leaders which is relegated to their deputies. Head-teachers need to collaborate with teachers on curriculum, assessment and instruction in order to enhance the quality of teaching and learning (Marts and Priny, 2003) and the main responsibilities of instructional leaders is gathering data on student achievement, and analyzing and using it to improve teaching and learning in schools (King, 2002).Hoy and Forsyth (1986, p. 3) indicate that “the purpose of supervision is not to control teachers, but to work cooperatively with them”. This definition indicate that the head-teacher needs to develop a community of professional learners in which teachers work collaboratively and in establishing expectations...
for quality student work and quality teaching. Teacher-leaders are responsible for motivating teachers and students, ensuring a safe and secure environment, communicating to parents and other administrative responsibilities (McTiffe, 2003). Thus in an effective school, the school head teacher acts as an instructional leader and effectively and persistently communicates to the staff, parents, and students. The principal understands and applies the characteristics of instructional effectiveness in the management of the instructional program. Studies show that leadership style is one of the critical factors that contribute to the results of student learning (Slavin, 1987; Barker-Lunn, 1970). Teachers need to vary level of material, pace, and content of instruction to correspond to students’ levels of readiness, learning rate, and interest (Slavin, 1987). When students are grouped heterogeneously for instruction by using models of cooperative learning and peer tutoring, teachers often find that teaching becomes more enjoyable (Putnam, 1994; Sapon-Shevinn, 1999; Sapon-Shevy, Ayres and Duncan, 2002; Thoand, Villa and Nevin, 2002).

Recommendations

Students need to be continuously assessed to obtain data for instructional decisions and grouping patterns. Differentiated instruction support is classroom practice where instructional tasks, efforts, and assistance are tailored to accommodate the performance needs of individual students within a classroom. Teachers can differentiate instructional content, process, product, and/or learning environment based on student readiness, interest, and/or learning profiles (Tomlinson, 2001) to respond to the unique needs of each student.

School head-teachers need to set high academic standards and expectations for students and teachers and set a clear direction for the school. They need to establish a cooperative and collaborative learning by defining the School’s Mission, Managing the Instructional Program, and Promoting a Positive School Learning Climate.

Conclusion

The results show significant differences between P1 and P2 schools in instructional supervision and instructional strategies. The head-teachers in both school types focus more on administrative roles such as school finances with little teaching work. Their emphasis on competition was found to have minimal impact on pupil achievement. P1 schools indicated that there is less mixed ability grouping in mathematics and reading while students’ learning preferences did not match their teacher’s teaching styles. However, P1 teachers preferred the direct teaching method while P2 schools emphasized competition. P1 schools indicated that there is less mixed ability grouping in high noise levels while P1 schools focused on same ability and mixed peer tutoring. Overall, research findings do not support streaming or ability-grouped teaching which result in high noise levels while P1 schools emphasized competition. P1 schools indicated that there is less mixed ability grouping in mathematics and reading while students’ learning preferences did not match their teacher’s teaching styles.

REFERENCES