

Testing or Learning: Teachers' Perceptions on School Practices

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Abstract: The purpose of this study was to examine teachers' perceptions of professional development and instructional practices. Perceptions of teachers whose school's focus was on student learning were contrasted with perceptions of teachers whose school's focus was on test scores. This study used a questionnaire to examine 92 suburban New York teachers' perceptions of two variables: instructional practices and professional development. The questionnaire was distributed at a faculty meeting. The findings indicated that teachers who perceive that their schools value student learning have more professional development opportunities and use higher level instructional practices than teachers in schools valuing test scores.

Key words: testing, school climate, professional development, instructional practices

1. Purpose

It is universally accepted that students need to be prepared for success in a rapidly changing world. Moreover, profound gaps exist between the knowledge and skills most students learn in school and the ones needed for success as independent adults in a globally competitive society. Coupled with these gaps are stakeholders' different interpretations concerning the appropriate focus of schools as well as recent federal initiatives such as Race to the Top (RTTT) that have heightened the stakes even further. In fact, New York State's winning RTTT proposal has resulted in significant changes in the learning standards, student assessments and the teacher and principal evaluation systems.

Public debate continues to escalate regarding the effect high-stakes testing is having on New York elementary teachers and ultimately, student learning. With the advent of the 2011 New York State Annual Professional Performance Review (APPR) regulations, all educational professionals will be held accountable for student growth on standardized achievement measures. Specifically, a positive annual performance review will be dependent on measureable student growth on New York State assessments. In effect, these new regulatory requirements have raised the bar of No Child Left Behind's (NCLB) 2014 Annual Yearly Progress (AYP) mandate.

At the same time, the educational community is emphasizing the importance of both 21st century skills and preparing students for college and career readiness. The skills involved in both areas are the antithesis of those currently required to demonstrate proficiency on New York State assessments. In 2008, Former President Van Dam of the International Society for Technology in Education (ISTE) reflected on the narrowing vision of what constitutes achievement in the age of NCLB when he stated, "Many districts are so overwhelmed and concerned about the NCLB requirements and potential financial repercussions of not complying, that for lots of them the

safest route is the “back-to-basics” approach, focusing entirely on 20th century skills at the expense of 21st century ones” (Casner-Lotto & Benner, 2006).

The purpose of this study was to examine teachers' perceptions of professional development and instructional practices. The perceptions of teachers who rated their school's focus as primarily targeting student learning was contrasted with the perceptions of teachers who rated their school's focus as primarily targeting increased test scores. Based on the literature review, it was suggested that teachers in “student learning” focused schools would perceive that they had more professional development opportunities and better developed instructional practices than teachers in “test scores” schools.

2. Literature Review

Discourse examining the relationship between testing and teaching has accrued considerable depth and breadth in the literature since 2002. A review of the literature however, reveals a paucity of research-based studies and conversely, a plethora of unsubstantiated claims presented in articles, commentaries and essays. Complex and at times contradictory, divergent teacher opinions regarding the effect of high-stakes tests on instruction has been reported. A majority of teachers report that testing has had a negative impact; an equally large majority state that it does not. As reported by Yeh (2005), opponents of high-stakes testing typically refer to four negative classroom effects produced by testing:

- (1) Narrowing the curriculum by excluding from it subject matter not tested;
- (2) Excluding topics not tested or likely to be on the test even within tested subjects;
- (3) Reducing learning to the memorization of facts easily recalled;
- (4) Devoting too much classroom time to test preparation rather than learning.

In contrast, the result of a large scale survey of 299 school districts in 50 states conducted by the Center of Educational Policy was released in 2006. Increased curricular time for reading and math was reported by 71% of the districts surveyed. However, the survey results suggest that there were mixed perceptions about the impact of this increased time and a general sense that this focus has obstructed time spent on other curricular domains.

Lai and Waltman (2008) surveyed Iowa teachers to determine changes to instructional practices that resulted from NCLB legislation. Their results suggested that teachers who perceived more pressure to raise test scores were more likely to make instructional changes. Furthermore, the changes that most often took place included the use of small groups and drill and practice methodologies. Additionally, “pressured” teachers reported an increase in the types and amount of assessments used throughout the year.

State-mandated testing influences teachers' beliefs and instructional practices (Cimbricz, 2002) in addition to teachers' subject knowledge, teaching and learning beliefs and the context of teacher roles. Cimbricz's study clearly indicates that aforementioned factors affect perception of state-mandated testing's influence on beliefs and practice and that more research is needed to analyze the influence of these other factors. High-stakes testing increases the amount of learning, as evidenced by performance on other tests. Additionally, if curriculum is adequately aligned to standards and assessments, then use of test data to refine curriculum is empirically supported.

The amount and type of professional development that is offered by school districts is also influenced by state-mandated testing. A recent RAND study (Hamilton et al., 2007) found strong efforts to provide professional development aimed at aligning instruction to standards and state assessments and to increase the use of assessment

data to drive instruction. There was also a shift in emphasis of professional development offerings on tested subjects and away from those subjects that are not tested.

Kent (2004) stated that high quality professional development must be specific to identified needs of local schools and must involve on-going follow up support to ensure that the initiatives presented are translated into actual instructional practices. In contrast, ineffective professional development is characterized by a neglect of connections to actual instructional practices and a lack of alignment with the school mission, curricular and assessment changes and evidence based best practices (Laine & Otto, 2000).

As stated by Lai and Waltman (2008), opponents of NCLB argue that major negative consequences of this legislation is an overreliance on “drill and kill” test preparation activities and a focus on teacher-centered instead of student-centered pedagogies. This is supported by Au’s (2007) meta-synthesis of 49 research articles concerning the effects of high-stakes testing on classroom instruction. An implication of both studies was that professional development opportunities often focus on increasing students’ proficiencies on high-stakes testing instead of on increasing overall student learning. Furthermore, both of these studies suggest that professional development opportunities have been negatively affected as a consequence of the NCLB legislation.

Lai and Waltman (2008) analyzed questionnaires from two time periods (2004–2005 and 2006–2007) and two distinct samples of Iowa teachers in order to compare changes to content student activities, teaching methods, assessments and curricular materials. Regarding professional development, their analysis suggested that school sponsored professional development was most common in the area of reading and least common in the non-accountability areas of science and social studies.

3. Research Design and Method

Research question: How do teachers’ perceptions towards instructional practices and professional development differ in terms of school focus (test scores versus student learning)?

4. Definitions of Terms

4.1 Instructional Practices

For the purpose of this study, instructional practices refers to a teacher’s ability to communicate clearly and accurately, use questions and discussion techniques, engage students in learning, and provide feedback to students, as well as demonstrate flexibility and responsiveness (Lowry, 2010).

4.2 Professional Development

For the purpose of this study, professional development refers to high-quality professional development opportunities that include but are not limited to use of assessment data, instructional strategies, and aligning curriculum and instruction that are directly correlated with information addressed by the New York State assessments (Lowry, 2010).

4.3 School Focus

For the purpose of this study, school focus is defined as shared beliefs and attitudes that characterize the district-wide organization and establish boundaries for its constituents units. School focus in this study is divided into two groups. One group’s priority is test scores and the other group’s priority is student learning.

5. Survey Instrument

This study was based on one completed by Lowry (2010) which involved the creation of a teacher questionnaire which addressed the factors of NCLB, instructional practices, test preparation, professional development and school climate. It consisted of 42, five point Likert scale items. Data was gathered from questionnaires completed by elementary school classroom teachers. Subjects were chosen from a suburban New York public school district that is currently engaged in the administration of New York State assessments in English language arts and mathematics and has three K-5 elementary schools. The total number of potential respondents was 102 K-5 classroom suburban New York teachers. There were 92 actual respondents. A high response rate was obtained because the survey was distributed at regularly scheduled faculty meetings within each building. Of the total respondents, 85.9% were female and 14.1% were male. 43.5% of the respondents were assigned to K-2 classrooms and 56.5 were assigned to 3–5 classrooms.

For the purposes of this study, the variable school focus was assessed by a single item (Table 1).

Table 1 Survey Question Concerning Focus

Which of these two statements best characterizes the focus of your school?

Mark only one:

- “My school is more interested in increasing test scores than in improving overall student learning.”
- “My school is more interested in improving overall student learning than in increasing test scores.”

A review of the original survey items as well as current literature resulted in changes to the Instructional Practices and Professional Development variables. The new Instructional Practices variable was comprised of 12 items and the new Professional Development variable was comprised of 7 items. These two factors were subjected to a reliability test. Cronbach alpha coefficients were .79 for Instructional Practices and .63 for Professional Development and reflected adequate internal reliability of both variables. The questions utilized in the revised survey relating to the two variables of interest are listed in the Tables 2 and 3 below.

Research Question

The research question examined was: How do teachers' perceptions towards instructional practices and professional development differ in terms of school focus (test scores versus student learning)?

Table 2 Professional Development (Cronbach's Alpha = .63)

Question Number	Items
1	Teachers receive additional time to work together and collaborate
2	Teachers receive additional time for professional development opportunities related to literacy
3	Teachers receive additional time for professional development opportunities related to mathematics
4	Teachers receive additional time for professional development opportunities related to the use of assessment data to inform instruction
5	Teachers receive additional time for professional development opportunities related to instructional strategies for students with disabilities
6	Teachers receive additional time for professional development opportunities related to instructional strategies for students with Limited English Proficiency
7	Teachers receive additional time for professional development activities that focus mainly on aligning curriculum and instruction with standards and/or assessments

Table 3 Instructional Practices (Cronbach's Alpha = .79)

Question Number	Items
8	I am able to successfully accommodate students' questions.
9	I use written language correctly, with well-chosen vocabulary.
10	I use spoken language correctly, with well-chosen vocabulary.
11	I make appropriate adjustments to lessons during instruction.
12	I teach lessons that have a clearly defined structure.
13	I persist in seeking effective approaches for students.
14	In my classroom, all students have a role in every learning activity.
15	I give feedback of high quality to students that need help.
16	I pace lessons appropriately for the needs of all students.
17	I insure that all students are cognitively engaged in activities and assignments.
18	I ask questions that require students to provide a thoughtful response.
19	I am able to successfully engage all students in classroom discussions.

6. Results

6.1 Comparison of Test Scores Focus and Student Learning Focus

This study examined differences between teachers who viewed their schools as primarily focused on student learning and teachers who viewed their schools as primarily focused on test scores and two variables of professional development and instructional practices. Two independent-samples *t* tests were conducted to evaluate the hypothesis that teachers who perceive that their schools value student learning have higher perceptions of professional development and instructional practices than teachers who perceive that their schools value test scores. The results are summarized in Table 4. Concerning professional development, the test was significant $t(83) = -2.91, p = 0.005$. Teachers who rated their schools as valuing student learning ($M = 27.59, SD = 2.57$) reported having more professional development opportunities than those who rated their schools as valuing test scores ($M = 25.78, SD = 3.07$). Teachers in student learning schools, on average, chose “agree” for seven questions measuring professional development while teachers in test scores schools, on average, chose “slightly agree” to “agree” for these same questions. Regarding instructional practices, the test was significant $t(78) = -3.25, p = 0.005$. Teachers who rated their schools as valuing student learning ($M = 43.72, SD = 6.08$) reported using higher level instructional practices than those who rated their schools as valuing test scores ($M = 39.08, SD = 5.80$). “Student learning” teachers, on average, chose “slightly agree” to “agree” for the 12 instructional practices questions while “test scores” teachers chose “slightly agree.”

Table 4 Independent Samples *t* Test — Comparison of Test Scores Focus and Student Learning Focus

	Focus	N	M	SD	t	p
Professional Development	test scores	29	25.76	3.07	-2.91	0.005
	student learning	56	27.59	2.57		
Instructional Practices	test scores	26	39.08	5.80	-3.25	0.002
	student learning	54	43.72	6.08		

7. Discussion

Elementary teachers who perceive their school to value student learning reported having more professional development opportunities and conversely, those who perceive their school to value test scores reported less professional development opportunities. These results align with Au (2007) and Lai and Waltman's (2008) assertions that high-stakes testing legislations has resulted in an overreliance on "drill and kill" test preparation activities, such as increasing students' proficiencies on high-stakes testing as opposed to student centered pedagogy and increasing overall student learning. When schools value test scores then efforts related to teaching to the test, "drill and kill" teaching and other test preparation techniques are supported and reinforced and less attention is given to professional development opportunities. On the other hand, when teachers view their schools as valuing student learning, more professional development opportunities are perceived to be available. An alternate explanation of this relationship could be that schools which offer significant amounts of professional development are perceived as valuing student learning.

In student-learning schools, elementary teachers reported using higher levels of instructional practices when teaching curriculum in various instructional settings. These findings concur with Cimbricz's (2002) findings concerning the influence of state-mandated testing upon teachers. Specifically, his research suggests that instructional practices are dependent upon how teachers interpret state testing and use it to guide their action. Additionally, Cimbricz found that the influence of state testing on specific teachers goes beyond their individual perceptions and actions and also include the network of constructed meanings inherent within the culture of their educational settings. This is consistent with the results of the current study which suggest that teachers' instructional practices vary dependent on their school's perceived focus. In other words, the influence of state testing on the culture of the school as a whole may be more important than its influence on individual teachers.

8. Recommendations

The present study concludes with recommendations as noted below:

- (1) Teachers receive additional time to coach and mentor new and veteran teachers.
- (2) Teachers receive additional time to participate on collaborative teams to assist teachers who are in jeopardy of not receiving tenure because they are not performing at the level required by the NCLB to meet curriculum and instruction standards as well as state mandates to effectively educate students.

References

- Au W. (2007). "High-stakes testing and curricular control: a qualitative metasynthesis", *Educational Researcher*, Vol. 36, No. 5, pp. 258–267.
- Casner-Lotto J. and Benner M. W. (2006). "Are they really ready to work? Employers' perspectives on the basic knowledge and applied skills of new entrants to the 21st century U.S. workforce", The Conference Board, Inc., the Partnership for 21st Century Skills, Corporate Voices for Working Families and the Society for Human Resource Management.
- Cimbricz S. (2002). "State-mandated testing and teachers' belief and practice", *Education Policy Analysis Archives*, Vol. 10, No. 2.
- Datnow A. and Castellano M. (2000). "Teachers' responses to Success for All: how beliefs, experiences and adaptations shape implementation", *American Education Research Journal*, Vol. 37, No. 3, pp. 775–799.
- Hamilton S. L., Stecher B. M., Marsh J. A., McCombs J. S., Robyn A. and Russell J. et al. (2007). "Standards-based accountability under no child left behind: Experiences of teachers and administrators in three states", Santa Monica, Ca.: RAND Corporation, MG-589-NSF, 2007, available online at: <http://www.rand.org/pubs/monographs/MG589/>.
- Kent Andrea M. (2004). "Improving teacher quality through professional development", *Education*, Vol. 124, No. 3, pp. 427–435.

- Lai E. L. and Waltman K. (2008). "The impact of NCLB on instruction: A comparison of results from 2004–05 to 2006–07", IARP Report #7, Center for Evaluation and Assessment, the University of Iowa, pp. 1–47.
- Laine S. W. M. and Otto C. (2000). "Professional development in education and the private sector: Following the leaders", Oak Brook, IL: North Central Regional Educational Laboratory.
- Lowry A. (2010). "The relationship of no child left behind mandates on elementary teacher instructional practices, test preparation, professional development, and school climate", *Ed.D. Dissertation*, Dowling College, United States: New York.
- Mitchell R. (2006). High Stakes Testing and Effects on Instruction: Research Review, The Center for Public Education.
- Shepard L. A. and Dougherty K. C. (1991). "Effects of high stakes testing on instruction", Keynote speech presented at American Educational Research Association and the National Council on Measurement in Education, Chicago.
- Yeh S. S. (2005). "Limiting the unintended consequences of high-stakes testing", *Education Policy Analysis Archives*, Vol. 13, No. 43, available online at: <http://epaa.asu.edu/epaa/v13n43/>.