

Professional Learning Communities and the Positive Effects on Student Achievement: A National Agenda for School Improvement

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ABSTRACT

Today's educational leaders face complex challenges. Transformation of public schools is essential if educators are going to meet the academic needs of all learners. Reculturing a school is an intricate process that causes fears and challenges, as well as opportunities, in the field of education. Professional learning communities have been at the forefront of reform efforts as a viable means of transforming schools to improve student achievement. A study was conducted to determine if student achievement was impacted as a result of professional learning communities. The findings from the study indicated that the majority of schools implementing professional learning communities increased their Texas Assessment of Knowledge and Skills (TAKS) scores in Mathematics and Reading/English Language Arts.

Introduction

The Richard DuFour and Robert Eaker (1998) model of professional learning communities is centered on three primary questions directly related to student performance. The questions are:

- (1) Exactly what is it we want all students to learn?
- (2) How will we know when each student has acquired the essential knowledge and skills?
- (3) What happens in our school when a student does not learn?

DuFour, DuFour, Eaker, and Karhanek (2004) believe that test scores will take care of themselves if educators commit to aligning their practices and resources so each student masters essential skills and concepts and if educators discontinue many traditional practices that do not serve that purpose. A vehicle for accomplishing this is through professional learning communities.

Purpose of this Article

The purpose of this article is to present the findings from a study on professional learning communities. Educational leaders who desire to create an environment of professional learners will systemically transform the organizational culture of their schools so that learning communities become “a way of life.” The organizational structure will change as leaders empower teachers to become an integral part of the decision making process. Skilled leaders are needed for this kind of change to endure time. Once the transformation to the learning community model is complete, student achievement is positively impacted.

Overview

Many leaders have embraced and implemented communities of learners; however, the reform has not endured over time. According to Fullan (2000), it takes approximately three years for an elementary and six years for a high school to achieve successful change. “Put in terms of the change process, there has been strong adoption and implementation, but not strong institutionalization” (Fullan, 2000, p. 1).

The first step in the study was to identify public high schools in Texas that were functioning as professional learning communities. A database of addresses of all public regular instruction high schools and the principal’s name were obtained through the Texas Education Agency (TEA). A database of districts and schools that were possibly implementing professional learning communities was obtained through Solution Tree, the home of professional learning communities, and Southwest Educational Development Laboratory (SEDL), the home of smaller learning communities.

Amanda Wooten, Grants Management Associate at Solution Tree, provided the name of the school district in Texas that hosted the professional learning community conference. Additionally, Wooten provided the name of school districts that attended the

conference. SEDL maintains a database of all schools that received smaller learning community grant money. Each database included schools from all educational levels and from each state. A list was compiled from the database containing Texas public high schools with a student population greater than one thousand. Findings from the study identified 64 Texas public high schools functioning as professional learning communities. The mean length of time the schools were functioning as professional learning communities was 2.5 years.

The second step was to collect results from the state mandated Texas Assessment of Knowledge and Skills (TAKS) test in Mathematics and Reading/English Language Arts. TAKS information was collected from the Academic Excellence Indicator System (AEIS) on the Texas Education Agency (TEA) website. Mathematics and Reading/English Language Arts scores were obtained for the 2004-2005 and 2005-2006 school years.

The third step was to calculate a change in Mathematics and Reading/English Language Arts TAKS scores for the following school years: (1) 2004 and 2005, (2) 2005 and 2006, and (3) 2004 and 2006. Descriptive statistics were calculated to determine the mean increases or decreases in TAKS scores.

Findings

As illustrated in Table 1, descriptive statistics are presented for the change in Mathematics TAKS scores. A mean change of scores of 4.92 points occurred for the 2004 and 2005 school years for schools functioning as professional learning communities with 42.3% increasing more than 5 points, and some schools increasing up to 15 points. For the 2005 and 2006 school years, a minimal mean change of 0.33 points occurred. Over a three year period from 2004 to 2006, a mean change in TAKS scores was 5.25 points with 42.3% increasing more than 5 points, and some schools increasing up to 18 points.

Table 1
Descriptive Statistics – Change in Mathematics TAKS Scores

	N	Min	Max	M	SD
2004-2005	64	-2	15	4.92	4.02
2005-2006	64	-9	9	0.33	3.83
2004-2006	64	-3	18	5.25	4.34
N	64				

Table 2 reflects the percentage of professional learning community schools that had an increase or decrease in TAKS Mathematics scores. For the 2004 and 2005 school years, 85.9% of schools reporting to be professional learning communities had an increase in Mathematics TAKS scores. For the 2005 and 2006 school years, 40.6% of schools had an increase. Over a three year period from 2004 to 2006, 90.6% of schools had an increase. For the 2004 and 2005 school years 55 out of the 64 schools improved in

their Mathematics TAKS scores. Over the three year period between 2004 and 2006 58 out of the 64 schools improved in their Mathematics TAKS scores.

Table 2

Percent of Schools with an Increase or Decrease in Mathematics TAKS Scores

		<u>2004-2005</u>		<u>2005-2006</u>		<u>2004-2006</u>	
		Freq.	%	Freq.	%	Freq.	%
Valid	Decrease	9	14.1	38	59.4	6	9.4
	Increase	55	85.9	26	40.6	58	90.6
	Total	64	100.0	64	100.0	64	100.0

Table 3 displays descriptive statistics for the change in Reading/English Language Arts TAKS scores. A mean change in scores of 1.34 occurred for the 2004 and 2005 school years for schools functioning as learning communities. For the 2005 and 2006 school years, Reading/English Language Arts TAKS results reflected an 8.95 mean change of scores with 75% increasing more than 5 points, and some schools increasing up to 21 points. Over a three year period from 2004 to 2006, a mean change in TAKS scores was 10.30 with 81.3% increasing more than 5 points, and some schools increasing up to 26 points.

Table 3

Descriptive Statistics – Change in Reading/English Language Arts TAKS Scores

	N	Min	Max	M	SD
2004-2005	64	-8	15	1.34	4.41
2005-2006	64	-4	21	8.95	4.47
2004-2006	64	0	26	10.30	5.18
N	64				

Table 4 reflects the percentage of professional learning community schools that had an increase or decrease in TAKS Reading/English Language Arts scores. For the 2004 and 2005 school year, 56.3% of schools had an increase in TAKS scores. For the 2005 and 2006 school years, 98.4% of schools increased their TAKS scores. Over a three year period from 2004 to 2006, 98.4% of learning community schools had an increase in TAKS Reading/English Language Arts scores. For the 2004 and 2005 school years and over a three year period between 2004 and 2006 63 out of the 64 schools improved in Reading/English Language Arts TAKS scores.

Table 4

Percent of Schools with an Increase or Decrease in Reading/English Language Arts TAKS Scores

		<u>2004-2005</u>		<u>2005-2006</u>		<u>2004-2006</u>	
		Freq.	%	Freq.	%	Freq.	%
Valid	Decrease	28	43.7	1	1.6	1	1.6
	Increase	36	56.3	63	98.4	63	98.4
	Total	64	100.0	64	100.0	64	100.0

Concluding Remarks

In conclusion professional learning communities empower the faculty and administration to work collectively to provide quality instruction and improve student learning. The data from this study indicated that almost all schools functioning as professional learning communities improved in their Mathematics and Reading/English Language Arts TAKS scores.

References

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