

A Comparison of Collaborative Practice and Teacher Leadership Between Low-Performing and High-Performing Rural Kentucky High Schools

Meagan R. Musselman

Murray State University

Meg A. Crittenden

Murray State University

Robert P. Lyons

Murray State University

This article reports the findings of the 2011 results of 'very rural' Kentucky high schools on the Teaching, Empowering, Leading and Learning (TELL) Survey to determine whether differences existed between high and low performing rural schools across specific survey items. Schools with ACT scores one standard deviation (or more) above their predicted value were compared to rural high schools where students' ACT scores were one standard deviation (or more) below their predicted value. Beale Codes of seven through nine from the United States Department of Agriculture were used to identify very rural Kentucky high schools. Very rural high schools identified as high-performing demonstrated significantly different results on survey items related to a culture of collaboration and teacher leadership than rural high schools identified as low performing. The survey suggested that in high-performing schools, the principal and teachers supported each other in their development as instructional leaders, and established communication and collaboration skills with families and community stakeholders.

Keywords: Teacher leadership; collaborative practice; TELL survey; high-performing high schools, rural high schools

On the surface, the term teacher leadership implies teachers take more responsibility within the schools for outcomes. It actually suggests much more. A school that cultivates teacher leadership provides ownership to all teachers for all students' learning. Every teacher becomes responsible for the learning within his/her school as a whole rather than just the learning within the individual's classroom.

Teacher leaders collaboratively learn and work together toward a shared purpose as a community. When principals, teachers, and parents work together, they form a concentration of leadership that is a powerful force in raising student achievement despite other limiting factors (Lambert, 2003). Teacher leaders are central to high-performing schools. High schools that exceed expectations have strong teacher leaders who help coordinate school reforms, and motivate colleagues and students. To achieve greater student success in small rural schools requires shared leadership between the school principal and teachers – distributed so that responsibility is shared. Does a culture of collaboration impact student achievement? The purpose of this study is to determine whether

very rural high schools identified as high-performing demonstrated significantly different results on survey items related to a culture of collaboration and teacher leadership than rural high schools identified as low performing.

Review of the Literature

Studies focusing on teachers as leaders (Bellon & Beaudry, 1992; Boles & Troen, 1992; Howey, 1988; Wasley, 1991; Waugh & Punch, 1987) emerged as educational reform movements intensified teacher participation in administrative contexts such as restructuring and school-based management. Current teacher leadership roles involve teachers as mentors, team leaders, data facilitators, and content coaches who intend to "be stronger professional resources for one another, their schools, and district reform" (Berg, Bosch, & Souvanna, 2013, p. 26). These roles facilitate teachers becoming leaders of change and involve them in decision-making processes. Berg, Bosch, & Souvanna (2013) studied the Boston Teacher Leadership Certificate program and how it

focuses on teacher-led professional development learning opportunities. They found four conditions teacher leaders perceived as critical to their effectiveness:

1. shared leadership, "through structured discussions that focus on alignment across levels of school leadership";
2. teachers have a sense of authority, teachers reported "clarity around authority was crucial to fulfilling their responsibilities confidently and feeling positive about their roles";
3. trust, "trust creates a culture where information and ideas are more readily shared" and
4. time, they "realize the importance of using existing time well" (pp. 27-29).

Shared leadership improves both teaching and learning. Principals who distribute leadership within their schools contribute to sustainable improvements in the school organization (Hargreaves & Fink, 2003; Spillane, 2006). Distributing leadership throughout a school and providing for leadership succession are crucial to a school's success (Hargreaves & Fink, 2003). "Principals who tap into the expertise of teachers throughout the process of transforming their schools and increasing the focus on learning are more successful" (Stronge, Richard, & Catano, 2008, p. 7). Also, principals are less likely to burn out if they focus on collaborative instructional leadership (Marks & Printy, 2003). Teacher leaders lead change from the classroom; they ask questions related to school improvement and feel empowered to help find the answer (Reason & Reason, 2007). Highly successful principals develop and count on the expertise of teacher leaders to improve school effectiveness (Leithwood, Seashore, Anderson, & Wahlstrom, 2004). This implies teachers are able to support each other in development as instructional leaders in high performing schools.

Teacher leadership is the process by which teachers, individually or collectively, influence their colleagues, principals, and other members of the school communities to improve teaching and learning practices with the aim of increased student learning and achievement. Such team leadership work involves three intentional development foci: individual development, collaboration or team development, and organizational development. (The Center for Comprehensive School Reform and Improvement, 2005, pp. 287-288)

Leaders who engage and empower teachers in a collaborative decision process support and reinforce the commitment of teachers. "Leaders of educational change have vision, foster a shared vision, and value human resources. They are proactive and take risks.

In addition, they strongly believe that the purpose of schools is to meet the academic needs of students and are effective communicators and listeners" (SEDL, 1992). Marzano and colleagues (2005) found high-achieving school principals provide opportunities for school staff involvement; to develop school policies, be involved in all important decisions, and utilize leadership teams in decision making. "There is no evidence of troubled schools turning around without the influence of strong leadership" (Stronge, Richard, & Catano, 2008, p. 6).

Improving outreach and collaboration with the community also support teaching and learning. Researchers and educators agree when parents get involved in education, children try harder and achieve more at school (Dunmont, Trautwein, Nagy, & Nagengast, 2014). Families and parents who hold and develop positive attitudes toward school, assist and encourage their children to learn at home, contribute to the academic success of their children. When families and schools work together, students demonstrate: increased achievement and performance (Galindo & Sheldon, 2012), decreases in disruptive behaviors (Sheridan, Bovaird, Glover, Garbacz, Witte, & Kwon, 2012), better study and work habits, homework completion and accuracy (Patall, Cooper, & Robinson, 2008), enhanced engagement and student efficacy (Gorski, 2013), and lower grade retention, drop-out rates (Miedel & Reynolds, 1999).

District administrators at all levels combined cannot independently generate leadership that improves education. Great schools grow when educators understand the power of their leadership lies in the strength of their relationships (Donaldson Jr., 2007). The effective school leader involves students, staff, parents, central office personnel, and community members (Stronge, Richard, & Catano, 2008). When every adult in the school is encouraged to have a collaborative voice with school leadership and the community, their power to improve student learning increases. Senge, Cambron-McCabe, Lucas, Smith, Dutton, and Kleiner (2000), state a principal should become a "lead teacher and lead learner as well as a steward of the learning process as a whole" (p. 15).

Improving outreach and collaboration with the community strengthens the relational bond between schools, families and the community; truly an example of the whole being greater than its parts.

Collaboration connotes a more durable and pervasive relationship. Collaboration brings previously separated organizations into a new structure with full commitment to a common mission. Such relationships require comprehensive planning and well-defined communication channels operating on many

levels. Authority is determined by the collaborative structure. Risk is much greater because each member of the collaboration contributes its own resources and reputation. Resources are pooled or jointly secured, and the products are shared. (Mattessich & Monsey, 1993, p. 39)

Successful collaboration between school and community groups working toward common goals can be valuable. Communities can either complement and strengthen the values, culture, and learning the schools provide for their students or contradict everything the schools strive to accomplish (Bryan & Henry, 2012). Successful partnerships between schools and the community are composed of school administrators who view the schools not as separated from, but as part of the larger community. Communities can provide students and schools with financial support as well as social and cultural values necessary for success and survival in today's society (Mattessich & Monsey, 1993).

Purpose of the Study

This study examined the 2011 results of 'very rural' Kentucky high schools on the Teaching, Empowering, Leading and Learning (TELL) Survey to determine whether differences existed across specific survey items that related to teacher leadership. Beale Codes from the United States Department of Agriculture were used to identify very rural Kentucky high schools as those with a Beale Code of seven, eight or nine. These codes form a classification scheme that distinguishes metropolitan counties by the population size of their metro area, and nonmetropolitan counties by degree of urbanization and adjacency to a metro area. The definitions of the Beale Codes used are (United States Department of Agriculture, 2013):
Seven: Nonmetro - Urban population of 2,500 to 19,999, not adjacent to a metro area.
Eight: Nonmetro - Completely rural or less than 2,500 urban population, adjacent to a metro area
Nine: Nonmetro - Completely rural or less than 2,500 urban population, not adjacent to a metro area.

Research Question

The research question guiding this study was: Do very rural high schools identified as high-performing demonstrate significantly different results on survey items related to a culture of collaboration and teacher leadership than rural high schools identified as low performing?

Procedures

Participants

Of 228 high schools in the state of Kentucky, 87 were classified in this study as 'very rural' based on the location of the school district in an area with a Beale code value of seven, eight or nine. Attendance boundaries of standard school districts in Kentucky are aligned with the governmental boundaries of each county, and were therefore referenced as county school districts. Other school districts may be established within counties, typically aligned with municipalities with sufficient tax base to support a school district independent of the county. These were referenced as independent school districts. The very rural high schools identified in this study represented 75 school districts across 58 counties in Kentucky. There were 58 county school districts and 17 independent districts in this group.

Regression analysis was used to identify high-performing and low performing schools by modeling the relationship between student achievement and poverty, then identifying schools that academically performed at least one-standard deviation above or below the model prediction. School-wide student achievement was the dependent variable and was represented by the school's 2011 Grade 11 ACT Composite mean. In Kentucky, all high school juniors are required to take the ACT, therefore the ACT serves as a valid measure of school-wide achievement. School-wide poverty was represented by the free and reduced lunch participation rate for each school. The standardized residual for each school was determined. Schools were identified as high-performing if the actual ACT Composite score exceeded the predicted score by at least one standard deviation, and as low performing if the ACT Composite score was below the score predicted by at least one standard deviation (see Figure 1). Eleven high-performing and 14 low-performing schools were identified by this method.

Schools identified in the low-performing and high-performing groups were examined in terms of the number of students tested (comparable enrollment numbers), free and reduced lunch participation to check for sample bias that might exist due to school structure or poverty. For example, the number of students tested was compared to ensure major organizational differences did not exist between groups due to practical considerations, such as cohort size. ACT Composite means were compared to ensure that absolute differences existed across the low and high performing groups.

Table 1 summarizes the findings. Significant differences ($p < 0.01$) between high and low

performing schools did exist in terms of student achievement, but not in terms of poverty or school size. This was viewed as validation as to the method of sample selection. There was a significant difference between the size of the average and high-performing schools, but not between the low and high performing schools. This difference was not interpreted as sample bias. In terms of district organization, five of the 11 high-performing districts were independent districts, with two of the low-performing districts identified as county districts.

The TELL Kentucky Survey

The 2011 TELL (Teaching, Empowering, Leading, Learning) Kentucky Survey was a statewide survey administered electronically to all school-based licensed educators yielding an 80% response rate (www.tellkentucky.org). The results are available for schools to use to facilitate school improvement. The survey was administered in the Spring of 2011 to all schools in Kentucky, and is designed to assess conditions viewed as relevant to teaching and learning (Hirsch, Sioberg, Dougherty, Maddock, & Church, 2012). Items on the survey are validated by eight constructs: (1) time, (2) facilities and resources, (3) managing student conduct, (4) teacher leadership, (5) school leadership, (6) professional development, (7) community support and involvement, and (8) instructional practices and support.

The Model Teacher Leader Standards

Researchers sought to look more specifically at the very rural population, but also desired to consider the TELL survey items in light of the Model Teacher Leader Standards (MTLS). The MTLS were developed by the Teacher Leadership Exploratory Consortium in 2010 for the purpose of advancing discussions amongst providers of professional development, including higher education institutions, as to the knowledge and skills required of teacher leaders in a school setting. Table 2 provides a description of each domain as described in the standards.

Professional judgment was used to regroup the TELL survey items according to the relative applicability to the standards. This was done to focus on items that corresponded to a culture of collaboration and teacher leadership. Table 3 reports the alignment and the percent of respondents 'agreeing' in term of the low-performing and high-performing groups. Not all standards are represented.

Results

A T-test of independent means was used to compare the low- performing and high-performing groups regarding the percent agreeing (or strongly agreeing) on the items included by domain. By this method of analysis, survey responses between low-performing and high-performing school two domains were statistically significantly different for two domains. Items within Domain IV, *Facilitating Improvements in Instruction and Student Learning*, ($t = -2.082$, $p = 0.049$) and Domain VI, *Improving Outreach and Collaboration with Community*, ($t = 2.840$, $p = 0.009$) were significantly different.

Discussion

Domains IV Facilitating Improvements in Teaching and Learning and VI Improving Outreach and Collaboration with Community were found to be significantly different in the rural high schools where students' ACT scores were one standard deviation (or more) above their predicted value compared to the rural high schools where students' ACT scores were one standard deviation (or more) below their predicted value. These high- performing high schools are culturally different in terms of teacher leadership and collaborative practice based on responses from the TELL survey.

Shared Leadership Improves Teaching and Learning

Domain IV is Facilitating Improvements in Instruction and Student Learning. This implies teachers are able to support each other in development as instructional leaders in high performing schools. Astute principals understand they cannot reach instructional goals alone (Hargreaves & Fink, 2003). Principals need to create opportunities for teachers to work together (Mendel et al., 2002). In order for teachers to cultivate and thrive within a school, the principal must create a culture that fosters collaboration. Principals share their leadership with teachers to promote reflection and collaborative investigation to improve teaching and learning. "A large and growing volume of research repeatedly finds that, when principals empower their staffs through sharing leadership and decision-making authority with them, everyone benefits, including students" (Cotton, 2003, p. 21).

Though principals have an indirect influence on student achievement (Hallinger & Heck, 1996; Leithwood & Riehl, 2003), they play a significant role in influencing teacher attitudes toward student learning and student opportunities to learn (Hallinger

et al., 1996). Principals must be cognizant of the strengths of all their teachers and provide opportunities for those strengths to improve student learning. Assisting teachers to develop their strengths and become dynamic leaders has become a chief responsibility of any principal committed to the implementation and practice set forth in *How to Thrive as a Teacher Leader* (Gabriel, 2005).

Teacher leaders are central to achieving continuous and effective school improvement. Teachers must be given opportunities to use their knowledge, skills and strengths in providing thoughtful leadership and activities that positively influence teaching and learning. Their role is key to the well-being of students, parents and the community at large. Effective teachers are informal leaders; the ones administrators call on for opinions and assistance in effecting change (Stronge, 2007).

Once a principal knows his/her staff's strengths and challenges, he or she is in a perfect situation to match up mentors with the new teachers. It is the responsibility of the principal to overcome the challenge of knowing the staff well enough to be able to match the needs of the new teacher with the strengths of an appropriate mentor (Sweeny, 2001). Scaffolding and guiding new teachers is a necessary process if they are to develop into effective teachers and career-long learners. Some teachers are born, but most teachers are made. People have to be encouraged and helped to become good teachers (Brody, 1977, p. 28). Furthermore, beginning teachers want principals to frequent their classrooms, as they yearn for encouragement about their performance (Mullen & Lick, 1999).

In order to facilitate improvements in instruction and student learning, teacher leaders take on the role of team leaders to capitalize on colleagues' particular skills and expertise. They coordinate this collaborative effort to address curricular expectations and student learning needs. They engage in reflective dialogue with colleagues based on observation of instruction, student work and assessment data while making connections to research-based effective practices. In order to do this, teacher leaders must have time (or create time) to observe colleagues teach. This observation is not evaluative. It is a means of collecting information to analyze and focus for improvement. The teachers are working as a team to improve student learning for all students within the school.

Teacher leaders are always looking for ways to improve the curriculum, instruction, and assessment within their school. They read current literature and attend professional meetings or conferences to stay abreast research-based effective practices. They

strive to be continuous learners by modeling this reflective practice to their colleagues.

Improving Outreach and Collaboration with Community

Domain VI is Improving Outreach and Collaboration with Families and Community. The high-performing schools in this study showed teachers established communication and collaboration skills with families and other community stakeholders and focused on achieving educational outcomes for students. "For rural schools to be successful in combating their problems, they will have to capitalize on their community and family ties" (Herzog & Pittman, 1995, p. 118). Families have a major influence on their children's achievement in school and through life. Schools, families, and community groups who work together to support learning, find their children tend to do better in school, stay in school longer, and like school more (Henderson & Mapp, 2002). Because children spend more time out of school than they do in school, home, community and school must work together on behalf of the child to close the achievement gap for students who are not successful in school.

According to Kythreotis and Pashiartis (1998), a study of school administrators in Cyprus confirmed the importance of positive parent-school relations as one of 10 factors evident in successful school leadership. Parent and community outreach is identified as one of the 26 essential traits of effective principals, as parents and the community contribute valuable input and assistance (Cotton, 2003).

Teacher culture based on relationships is tremendously influential in schools, often surpassing administrative and legislative influence (Spillane, 2006). Although some administrators and policymakers may view this as a problem, strong relationships are teachers' most prevailing leadership asset (Goleman, Boyatzis, & McKee, 2002). Dewey (1959) believed "face to face relationships have consequences which generate a community of interests, a sharing of values..." (p. 39). Teacher leaders collaboratively influence educational communities beyond their classrooms when they contribute outside their school in district-wide committees and speak at school board meetings, conferences, or at community functions; all face to face relationships. One study on National Board Certified teachers found these teachers to be effective advocates for education in their communities, districts, and schools (Mitchell, 1998). Relationship building and stakeholder involvement are essential in establishing and sustaining school success (Cotton,

2003; Fullan, 2001; Kythreotis & Pashiartis, 1998; Marzano et al., 2005).

Communities may potentially offer a variety of social, cultural, and vocational opportunities to students and to their families (Bell & Sigsworth, 1987). The impact community and school partnerships have on the lives of rural youth and adults over an extended period of partnership will fundamentally change the way schools prepare rural youth for the future (Adsit, 2011).

Students who come to school reflect the wider community; when students leave school, either before or after graduation, they return to that community. It's impossible to isolate 'school' within the walls of the school building. Effective strategies to keep students in school take advantage of these links with the wider community (Schargel & Smink, 2004, P. xix).

Teacher leaders see parents and community members as assets in improving student learning. They promote frequent and effective outreach with families, community members, and business leaders. They approach these parties with a positive attitude and a focus on improving educational outcomes.

Next Steps

There are pre-service and in-service implications of this research. Undergraduate programs for teacher preparation are constructed to develop knowledge, skills and dispositions essential to effective teaching. Pedagogical and content knowledge are principle elements of this preparation. The capacity to collaborate with other professionals and to engage the community are not necessarily absent pre-service undergraduate teacher preparation, but many times take a back seat to the basic pedagogical capacity. To some extent this is understandable. However, this research suggests true benefit for more attention to capacity in collaboration and outreach capacities early on in teacher preparation.

Capacity building certainly continues for teachers in-service through school district professional development and university coursework. The school districts in question are very rural and small. This calls into question the resources that can be brought to bear on professional development through the district, meaning that the university is a valuable partner for these schools in the development of capacity within teachers. It is critical that this partnership manifest in communication about what collaboration and outreach 'looks like' and that together this agenda be advanced, either through the available professional development at the school district or through university coursework.

Further investigation is warranted with regard to specific practices at the district or university levels that may precipitate the knowledge, skills and dispositions in the areas of significance for high-performing schools. The identification of specific practices could inform further policy with pre-service or in-service activities.

Conclusion

High performing high schools are culturally different in terms of collaborative practice and teacher leadership. Domains IV, Facilitating Improvements in Instruction and Student Learning and VI, Improving Outreach and Collaboration with Families and Community were both found to be significantly different in the rural high schools where students' ACT scores were one standard deviation (or more) above their predicted value compared to the rural high schools where students' ACT scores were one standard deviation (or more) below their predicted value.

The high performing schools in this study showed teachers established communication and collaboration skills with families and other community stakeholders and focused on achieving educational outcomes for students. Teacher leaders were central to the facilitation and achievement of continuous and effective school improvement in instruction and student learning. They were given opportunities to use their knowledge, skills and strengths in providing thoughtful leadership and activities that positively influenced teaching and learning.

So what does this study mean for rural high schools? The use of teacher leaders is a powerful strategy to facilitate school improvement in instruction and student learning. Teacher leaders collaboratively influence educational communities beyond their classrooms with face to face relationships with families and community. Relationship building and stakeholder involvement focused on achieving educational outcomes for students extended over time will assist in the preparation of our rural youth, molding their future.

Principals of rural low performing high schools need to provide teachers opportunities to become leaders in their school. Principals need to create a school culture that fosters teachers to work together as a collaborative learning community and focuses on achieving educational outcomes for students. Principals must know the strengths of individual staff members and provide opportunities for those strengths central to the improvement of student learning. Teacher leaders are key to the facilitation and achievement of continuous and effective school

improvement in instruction and student learning. Teacher leaders must be given opportunities to use thoughtful leadership and activities that positively influence teaching and learning. Principals need to empower their staff with shared leadership, decision-making authority and promote reflection and collaborative investigation to allow teacher leadership to improve teaching and learning. Principals of rural low performing high schools

should capitalize on teachers' skills and expertise, provide time in the day's schedule to allow teacher leaders to observe colleagues teaching in order to improve student learning. Also, the establishment of teacher leader communication and collaboration with families and community stakeholders outside the classroom is necessary. A community learning environment will enrich and extend teaching opportunities, which will result in student learning.

References

- Adsit, T. (2011). *Small schools, education, and the importance of community: Pathways to improvement and a sustainable future*. Lanham, MD: Rowman & Littlefield Education.
- Bell, A., & Sigsworth, A. (1987). *The small rural primary school: A matter of quality*, London, The Falmer Press.
- Bellon, T., & Beaudry, J. (1992, April). *Teachers' perceptions of their leadership roles in site based decision making*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.
- Berg, J., Bosch, C. & Souvanna, P. (2013). Critical conditions. *Journal of Staff Development*, 34(6), 26-29.
- Blase, J., & Blase, J. (2001). *Empowering teachers: What successful principals do* (2nd ed.). Thousand Oakes, CA: Corwin Press.
- Boles, K., & Troen, V. (1992). How teachers make restructuring happen. *Educational Leadership*, 49(5), 53-56.
- Brody, J.A. (1977). A good teacher is harder to define than find. *American School Board Journal*, 164(7), 25-28.
- Bryan, J., & Henry, L. (2012). A model for building school-family-community partnerships: Principles and process. *Journal of Counseling & development*, 90(4), 408-420.
- Cotton, K. (2003). *Principals and student achievement: What the research says*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Danielson, C. (2007, September). The many faces of leadership, *Teachers as leaders*, 65(1), 14-19.
- Dewey, J. (1959). *The public and its problems*. New York: Teachers College Press.
- Donaldson Jr., G. A. (2007, September). What do teachers bring to leadership? *Teachers as Leaders*, 65(1), 26-29.
- Drago-Severson, E. (2004). *Helping teachers learn: Principal leadership for adult growth and development*. Thousand Oaks, CA: Corwin Press.
- Dumont, H., Trautwein, U., Nagy, G. & Nagengast, B. (2014). Quality of parental homework involvement: Predictions and reciprocal relations with academic functioning in the reading domain, *Journal of Educational Psychology*, 106(1), 144-161.
- Fullan, M. (2001). *Leading in a culture of change*. San Francisco: Jossey-Bass.
- Gabriel, J. (2005). *How to thrive as a teacher leader*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Galindo, C., & Sheldon, S.B. (2012). School and home connections and children's kindergarten achievement gains: The mediating role of family involvement. *Early Childhood Research Quarterly*, 27(1), 90-103.
- Goleman, D., Boyatzis, R., & McKee, A. (2002). *Primal leadership: Realizing the power of emotional intelligence*. Cambridge, MA: Harvard Business School Press.
- Gorski, P. (2013). Building a pedagogy of engagement for students in poverty. *Phi Delta Kappan*, 95(1), 48-52.
- Hallinger, P., Bickman, L., & Davis, K. (1996). School context, principal leadership, and student reading achievement. *The Elementary School Journal*, 96(5), 527-549.
- Hallinger, P., & Heck, R. H. (1996). Reassessing the principal's role in school effectiveness: A review of empirical research, 1980-1995. *Educational Administration Quarterly*, 32(1), 5-44.
- Hargreaves, A., & Fink, D. (2003, May). Sustaining Leadership. *Phi Delta Kappan*, 84(9), 693-700.
- Henderson, A., & Mapp, K. (2002). *A new wave of evidence: The impact of school, family, and community connections on student achievement*. Austin, TX: Southwest Educational Development Laboratory.
- Herzog, M. J., & Pittman, R. B. (1995). Home, family, and community: Ingredients in the rural education equation. *Phi Delta Kappan*, 77(2), 113-118.

- Hirsch, E., Sioberg, A., Daugherty, P., Maddock, A., & Church, K. (2012). *TELL Kentucky: Creating supportive conditions for enhancing teacher effectiveness*. Retrieved from www.tellkentucky.org
- Howey, K.R. (1988). Why teacher leadership? *Journal of Teacher Education*, 34(1), 28-31.
- Kentucky Department of Education (2014). *2013-2014 Kentucky Schools Directory*. <http://education.ky.gov/comm/Pages/2013-2014-Kentucky-Schools-Directory.aspx>
- Kythreotis, A., & Pashiartis, P. (1998). *The influence of school leadership styles and culture on students' achievement in Cyprus primary schools*. Nicosia: University of Cyprus.
- Lambert, L. (2003). *Leadership capacity for lasting school improvement*. Alexandria, VA: Association of Supervision and Curriculum Development.
- Leithwood, K.A., & Riehl, C. (2003, March). *What do we already know about successful school leadership?* Washington, DC: AERA Division A Task Force on Developing Research in Educational Leadership.
- Leithwood, K., Seashore Louis, K., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences student learning*. St. Paul, MO: Learning From Research Project: University of Minnesota, Center for Applied Research and Educational Improvement (CAREI); Toronto: Ontario Institute for Studies in Education at the University of Toronto (OISEUT); and New York: The Wallace Foundation.
- Mapp, K. (2004). Family engagement. In F. P. Schargel & J. Smink (Eds.), *Helping students graduate: A strategic approach to dropout prevention* (pp. 99-113). Larchmont, NY: Eye on Education.
- Marks, H.M., & Printy, S.M. (2003). Principal leadership and school performance: An integration of transformational and instructional leadership. *Educational Administration Quarterly*, 39(3), 370-397.
- Marzano, R., Waters, T. & McNulty, B. A. (2005). *School leadership that works: From research to results*. Alexandria, VA: Association of Curriculum and Development; and Aurora, CO: Mid-continent Research for Education and Learning.
- Mattessich, P., Monsey, B. (1993). *Collaboration: What makes it work?* St. Paul, MN: Amherst H. Wilder Foundation.
- Mendel, C. M., Watson, R. L., & MacGregor, C. J. (2002). *A study of leadership behaviors of elementary principals compared with school climate*. Paper presented at the Southern Regional Council for Educational Administration, Kansas City, MO.
- Miedel, W., & Reynolds, A. (1999). Parent involvement in early intervention for disadvantaged children: Does it matter? *Journal of School Psychology*, 37(4), 379-402.
- Miller, D.C. (1991). *Handbook of research design and social measurement*. Newbury Park, CA: Sage.
- Mitchell, R.D. (1998). World class teachers: When top teachers earn National Board Certification, schools-and students-reap the benefits. *The American School Board Journal*, 185(9), 27-29.
- Mullen, C.A., & Lick, D.W. (Eds.). (1999). *New directions in mentoring: Creating a culture of synergy*. New York: Falmer Press.
- Patall, E. A., Cooper, H. & Robinson, J. (2008). Parent involvement in homework: A research synthesis. *Review of Educational Research*, 78(4), 1039-1101.
- Reason, C., & Reason, L. (2007, September). Asking the right questions. *Educational Leadership*, 65(1), 36-47.
- Schargel, F.P., & Smink, J. (2004). *Helping students graduate: A strategic approach to dropout prevention*. Larchmont, NY: Eye on Education.
- SEDL (1992). Leadership characteristics that facilitate change; Characteristics of leaders of change. Southwest Educational Development Laboratory. <http://www.sedl.org/change/leadership/character.html>
- Senge, P., Cambron-McCabe, N. Lucas, T. Smith, B., Dutton, J., Kleiner, A. (2000). *Schools that learn*. New York: Doubleday.
- Sheridan, S. M., Bovaird, J. A., Glover, T. A., Garbacz, S. A., Witte, A., & Kwon, K. (2012). A randomized trial examining the effects of conjoint behavioral consultation and the mediating role of the parent-teacher relationship. *School Psychology Review*, 41(1), 23-46.
- Spillane, J. (2006). *Distributed leadership*. San Francisco: Jossey-Bass.
- Stronge, J.H. (2007). *Qualities of effective teachers*. Alexandria, VA: Association of Curriculum and Development.
- Stronge, J.H., Richard, H. B., & Catano, N. (2008). *Qualities of effective principals*. Alexandria, VA: Association of Curriculum and Development.
- Teacher Leadership Exploratory Consortium (2012, February). *Model teacher leader standards*. Retrieved from http://tstandards.pbworks.com/f/13852_TeacherLeaderStnds_HR.pdf
- The Center for Comprehensive School Reform and Improvement. (2005). *What does the research tell*

us about teacher leadership? Washington, DC.
Retrieved from
http://www.centerforcsri.org/files/Center_RB_sep_t05.pdf

United States Department of Agriculture, Economic Research Service (2013). Rural-Urban continuum codes. Retrieved from

<http://www.ers.usda.gov/data-products/rural-urban-continuum-codes.aspx#.UxTcjfldWSo>
Waugh, R.F. & Punch, K.F. (1987). Teacher receptivity to system-wide change in the implementation stage. *Review of Educational Research*, 57(3), 237-254.

About the Authors:

Meagan R. Musselman is an Assistant Professor at Murray State University. She is a National Board Certified Teacher with a background in Middle School Education and Teacher Leadership.

Meg A. Crittenden is an Assistant Professor in School Administration at Murray State University. Her background includes special education, gifted/talented, and school administration: middle school assistant principal, elementary principal, district director of elementary programs and public relations, and assistant superintendent.

Robert P. Lyons is a Professor & Department Chair at Murray State University. He serves on the faculty of the school administration program.