NATIONAL ACADEMY OF ADVANCED TEACHER EDUCATION

ABSTRACT

The NAATE program curriculum focuses in part on key aspects of teacher leadership. Through self-reported measures, NAATE graduates show increases in a broad range of activities and behaviors identified in the literature as central to effective teacher leadership.

RESEARCH QUESTION

The NAATE Program was founded to design and deliver a unique professional learning intervention to experienced, high performing teachers in order to retain them longer in classroom teaching, deepen their instructional practices and improve their ability to support and lead their peers. NAATE provides an intense, 350 hour residential program for top tier teachers that balances instructional and leadership content. In order to assess the impact on participants' work beyond their classrooms with their peers and the broader school community, NAATE initiated pre- and post-program survey instruments of graduates to determine what, if any, aspects of their work as teacher leaders changed over the course of their engagement in the NAATE Program.

This short research report is designed to answer the following question:

What is the impact of a 350 hour professional learning intervention on participant's key teacher leadership practices as identified in the literature?

LITERATURE REVIEW

One primary focus of the NAATE program is to improve high-performing teachers' ability to support and lead their peers[1]. The aspects of literature reviewed here all focus on the role of teachers as leaders within their school buildings among their peers and with their formal school leaders. The domains that fall under NAATE's Supporting and Leading module (Communication and Feedback with Peers; Teaming and Adult Group Work; Influence & Leadership; School Culture, Climate and Organizational Effectiveness; and Adult Learning & Professional Development) mirror the literature on the suite of conceptual ideas critical to developing competent teacher leaders.

Teacher leadership has been an evolving concept within K-12 education for decades (York-Barr, Duke, 1993). While there is not universal agreement on the impact of teacher leadership on student outcomes (York-Barr, Duke, 1993; Leithwood, Jantzi, 1999), numerous researchers have reported direct and indirect effects on student outcomes of teachers in their roles beyond their classrooms. Teachers who are empowered and collaborative share instructional practices and increase efforts to improve instruction according to research (Marks and Louis, 1997). Transformational leadership that includes engaging teachers, teacher leaders and teacher teams leads to improved student outcomes broadly and student achievement gains specifically (Silins and Mulford, 2002). A sense of collective teacher efficacy leads to a focus on improving student performance (Leithwood, Patten, Jantzi, 2010).

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[1]NAATE's measurement of impact on participants in their classroom practice is described separately from this report, as is NAATE's impact on teacher participant retention.

Working conditions including peer relations, school culture and a sense of active involvement in setting those conditions leads to better teacher retention and higher rates of student academic growth (Johnson, Kraft, Papay, 2012). Collective leadership, driven in part by teacher leaders, explained a significant portion of variation in student achievement across studied schools by Leithwood and Mascall and teacher motivation and influence were cited as important components (Leithwood, Mascall, 2008).

Most recently a shift in thinking has occurred to include not just concepts of individual teachers in their roles as leaders, but the collective energy of groups of teachers and leadership more broadly as an organizational construct (Ogawa Bossert, 1995; Leithwood, Mascall, 2008).

NAATE mapped its curriculum to conceptual ideas and elements identified as critical aspects of teacher leadership, from components of communications and feedback (Johnson, Kraft, Papay 2012; Schunk, Zimmerman, 1998; Rogers, Roethlisberger, 1991), to group work and teaming (Smylie, Conley, Marks, 2011; Katzenbach, Smith 1993), to organizational effectiveness (Kraft, Papay, 2014; Schein, 2010), to adult learning competencies (Grow, 1991; Knowles, 1973; Brookfield, 1986) and leadership itself (Leithwood, Macall, 2008). Foundational to work with peers in any capacity is the ability to listen, understand, communicate and support. Peer relations are essential (Johnson, Kraft Papay, 2012) whether the role is as a mentor, coach, team leader or team participant. Self-reflectiveness is essential for teacher leaders as they work toward continuously improving their performance inside and outside the classroom. (Schön, 1983; Schunk, Zimmerman 1998).

Once a base of understandings about person-to-person communications is established, other aspects of teacher leadership can more successfully be introduced. Teaming and adult working group structures offer schools highly productive ways to access and leverage the energy and experience of their talented teachers, but require a range of understandings of the successful components of real self-led teams (Erb 1987) and component aspects such as mutual accountability, collective work products, psychological safety, group dynamics, affective and task conflict, social identity and facilitation (Katzenbach 193; Hill, 2001; Polzer, 2003; Hackman, 1986; Bens, 2012).

After smaller grouping structures and processes are understood, their role and the role of individual leaders in the overall effectiveness of the school and network represents a significant opportunity for teacher leaders. Their participation in the overall direction and leadership of the school can effectively leverage formal school leaders and ensure that the appropriate climate and culture and instructional strategies are implemented day in and day out (Ogawa, Bossert, 1995; Schein, 2010; Owens, 2003). A final major dimension of teacher leadership is in the continuous professional development of the entire teaching staff of schools and networks. In order for job-embedded professional learning to take place, competent trained teacher leaders with facilitation, coaching, mentoring and other adult learning competencies are required (Coggshall et al, 2012; Croft, 2010; Kennedy, 1993).

NAATE PROGRAM METHODS

NAATE programming consists of 350 hours of learning across three to five face-to-face residential sessions. Each session comprises three class periods per day and all classes are delivered through discussion-based learning methods, specifically the case method of instruction popularized by the Harvard Business School. It is participant-driven, inquiry-based learning that requires significant pre-work, inductive reasoning, active listening and civil debate about real world problems of practice.

RESEARCH METHODS

Teacher participants in the NAATE program are selected by school networks and meet the minimum criteria of three to twelve years in classroom teaching; demonstrated high performance by school assessment measures which include at least some element of student outcomes; demonstrated capacity to support and lead peer teachers which includes formal or informal leadership roles and influence within the school and school network. Prior to entry into the first residential session of the NAATE program, participants take part in a survey administered online with a series of questions measuring their self-assessed level of ability and alignment with explicit statements related to aspects of both their classroom practices and their work outside the classroom with peers and in the broader school community. This series of questions is repeated upon completion of the full complement of NAATE related course work and content 15 months later (Summer Cohorts) or 22 months later (School Year Cohorts). Values are compared between the pre- and post-program survey results.

In parallel with teacher survey instruments, NAATE conducts School Leader surveys of formal administrators with whom NAATE Teacher Fellows work in school buildings. A similar set of questions comprise the School Leader survey instrument oriented toward re-portage of observed changes in practice witnessed by formal school leaders of their NAATE graduates.

FINDINGS

An examination of Cohorts III – VII of NAATE graduates totaling 156 respondents from 101 schools and 38 school networks in 15 states indicate substantial self-reported changes occurring across a wide range of indices repre-sented within the major domain of the NAATE Supporting & Leading curriculum.

The battery of questions interrogate changes in respondent self ratings on dimensions in basic communications and feedback, influence, self-reflectiveness, teaming, leadership, broader organizational influence, and adult learning competencies paralleling the strands of NAATE program content and as identified in the research literature.

DISCUSSION

NAATE graduates in Cohorts III – VII indicate significant growth in their self-perception of changes in their abilities across many of the measured dimensions.

Communication and Feedback with Peers

Respondents report an increase in their ability to observe and support their peers. They were asked to rate themselves on a 10-point scale with 10 being the highest rating. Before the NAATE program 45% rated themselves while post program 75% rated themselves highly. These reported changes were bilateral in nature as respondents also made significant gains in encouraging peers to observe and support their own development (pre-program 53% → post-program 77%). Marked change in their one-to-one communications (57% →81%) and self-reflectiveness were also recorded (62% → 87%). A smaller improvement in active listening was also reported (71% → 88%). Over-all, graduates report improvements in these key activities in the domain of adult-to-adult com-munications, observation and feedback, which are crucial to their performance in and across classrooms (Johnson, Kraft, Papay, 2012).

Teaming and Adult Group Work

Two dimensions of teaming were also explored through the survey instrument, one of initiating and leading small groups of peers and a separate question about level of active participation in teacher teams regardless of their leadership

Teachers' Self Reflection

	Pre-Program[1]	Post-Program[1]	Difference
Communication and Feedback			
Observe colleagues and offer constructive feedback to enhance their practice	45%	75%	+30%
Effectively communicate ideas one-on-one to teachers and other adults	57%	81%	+24%
Reflect on your interactions with teachers and other adults in order to build productive relationships	62%	87%	+25%
Encourage observations and feedback from colleagues to enhance your own practice	53%	77%	+24%
Actively listen to teachers and other adults in order to incorporate different perspectives into your thinking and make better decisions	71%	88%	+17%
Leading, Teaming and Adult Learning			
Design and deliver professional development that is geared to adult needs and learning styles	30%	68%	+38%
Take initiative to form, lead or support teams or small groups of adults who work together to achieve established goals	41%	73%	+32%
Present ideas to teachers and other adults in a public forum	45%	71%	+26%
Actively participate in teams or small groups even when not serving as the leader	71%	90%	+19%

	Pre-Program[2]	Post-Program[2]	Difference
Influence and Leadership			
I actively use my influence at school to improve school practices and the quality of adult interactions	32%	56%	+24%
I effectively use my leadership talents to steer other adults toward decisions that help improve my school	21%	45%	+24%
School Culture, Climate and Organizational Effectiveness			
I use my strong understanding of the school's climate and culture to help me contribute to my school's success	49%	59%	+10%
I use my in-depth knowledge of the school's organizational structure and procedures to have a positive impact on the way things are done at my school	34%	52%	+18%

1. Percent rating 8 or higher out of 10
2. Percent rating "Very Close"

role. As Johnson et al. (2014) report on how teachers effectively contribute to school wide leadership, "…leadership activity… grew out of professional knowledge and experience and depended on teachers' readiness to commit time and effort to school-wide improvement. Individuals sought to influence colleagues and their schools primarily through the work of various teams in the building" (Johnson et al., 2014, p. 18). Before the NAATE program, 41% rated themselves highly in actively organizing and leading teams, while post program 73% rated themselves highly on this dimension. As for their roles as participants regardless of leadership, an increase was also noted (71% → 90%). "They [teacher leaders] can exercise considerable influence in school-wide improvement efforts both as leaders and followers" (Johnson et al., 2014, p. 35).

Influence and Leadership

"…[E]mpowering teachers to wield greater influence over school policy matters concerning the school learning climate may be the most effective strategy for school principals to improve student achievement" (Sebastian, Allensworth, Huang, 2016, p. 91 – 92). NAATE examined respondents concerning how actively they exercise their influence and measured a significant increase in how highly they rated themselves on this dimension (32% → 56%). Similarly when asked about the use of their leadership talents, their post-program responses increased to 45% from a pre-program response rate of 21%.

School Culture, Climate and Organizational Effectiveness

Only through a comprehensive understanding of the levers of school structures and school culture (Schein, 1993) can teacher leaders effectively contribute to school wide improvement. The NAATE module on Organizational Effectiveness exposes participants to the conceptual ideas that underpin both sides of effectiveness – structures and culture.

The self-reported changes in respondents' "strong understanding of the school's climate and culture" increased from 49% → 59%. Graduates use of "knowledge of their school's organizational structures and procedures" increased from 34% → 52%.

Adult Learning & Professional Development

NAATE expects graduates to return to their schools with the knowledge and understanding to re-conceptualize the design and delivery of differentiated professional learning for their peers. This approach is consistent with the reported need for trained facilitators, teacher leaders, coaches, mentors and other personnel in order to enact genuine job-embedded professional learning programs (Coggshall et al., 2012; Croft et al., 2010). NAATE graduates report a significant increase in their self-rating on the "design and delivery of professional development that is geared to adult needs and learning styles" from 30% → 68%.

Increases were recorded in self-reported data across the five strands/modules of the NAATE Supporting & Leading curriculum. Each module draws its support from the research literature on effective principles for leading school improvement and involving teacher leaders in effective ways.

CONCLUSIONS

NAATE's work in deepening participants' instructional practices and NAATE's results in retaining NAATE graduates in student-facing roles as classroom teachers are described in separate reports. The foci of this analysis were twofold: Can alignment be found between a differentiated advanced learning program for experienced, high performing classroom teachers and the research literature related to the impact of teacher leaders on school performance? Does such a professional learning intervention have any impact on participants in terms of self-reported changes in their leadership and support roles?

The answers to both these questions are promising. The construction of the Supporting & Leading modules in the NAATE program find resonance in the research literature both in terms of identified concepts such as collective teacher efficacy, teacher influence, observation and feedback and participation in the shaping of climate and culture and in their direct and indirect linkages to improved student outcomes.

While this analysis represents self-reported pre- and post-assessments, the increases in self-perceived performance in so many critical domains of teacher leader behavior and action is encouraging.

FUTURE RESEARCH

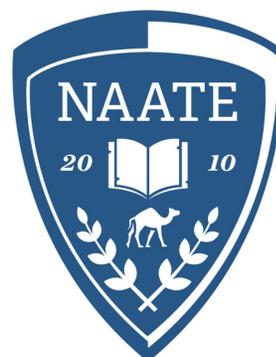The present report prompts the need for additional research.

• Understanding the specific mechanisms that account for changes in participants' attitudes, behavior and mindset shifts and along with those understandings, determining what duration (dosage) of programming is required to drive each effect would be a valuable added contribution to our knowledge about the NAATE program.

• As the number of graduates continues to increase, NAATE will consider other analysis methods that can be used with larger data sets.

• NAATE posits that its integration of the dual domains of Teaching & Learning and Supporting & Leading provides a type of scaffolding that leads to deeper learning in both domains, and NAATE is looking at possibilities to document that effect.

• Along with the "dosage" question above, when NAATE measures its near-term impact on schools, what is the effect of varying numbers of NAATE graduates within a single school on the improvement of individuals and the improvement of the school as a whole?

• As NAATE continues to recruit top performing teachers, how should it be measuring school level impact longer term? What are the right measures for a professional learning intervention on whole school change?

REFERENCES

Bens, Ingrid. Facilitation at a Glance! Your Pocket Guide to Facilitation. New York, NY: GOALPC, 2012.

Brookfield, Stephen D. Understanding and Facilitating Adult Learning: A Comprehensive Analysis of Principles and Effective Practices. San Francisco: Jossey-Bass, 1986.

Coggshall, Jane G., Claudette Rasmussen, Amy Colton, Jessica Milton, Catherine Jacques. "Generating Teaching Effectiveness: The Role of Job-Embedded Professional Learning in Teacher Education." National Comprehensive Center for Teacher Quality. Washington DC. May 2012, pp. 1 – 36.

Croft, Andrew, Jane Coggshall, Megan Dolan, Elizabeth Powers, and Joellen Killion. "Job-Embedded Professional Development: What It Is, Who Is Responsible, and How to Get It Done Well." National Comprehensive Center for Teacher Quality. Washington DC. April 2010, pp. 1 -20.

Erb, Thomas O. "What Team Organization Can Do for Teachers." Middle School Journal. Volume 18 4 (August 1987), 3 – 6.

Grow, Gerald. "Teaching Learners To Be Self-Directed." Adult Education Quarterly. 1991, Vol. 41, 3 (Spring 1991): 125 -149.

Hackman, J. Richard. "The Psychology of Self-Management in Organizations." American Psychological Association Master Lectures Vol. 5 (1986) 89 – 136.

Hackman, J. Richard. Groups That Work and Those That Don't: Creating Conditions for Effective Teamwork. San Francisco: Jossey-Bass, 1990, 146 – 153.

Hill, Linda. "A Note on Team Process." Case Note 9-402-032. Boston: Harvard Business Publishing, 2001.

Jackson, C. Kirabo, and Elias Bruegmann. "Teaching Students and Teaching Each Other: The Importance of Peer Learning for Teachers." Working Paper 15202, National Bureau of Economic Research, Cambridge, MA, August 2009, pp. 1 – 38. http://www.nber.org/papers/w15202

Jacques, Catherine, Gretchen Weber, David Bosso, Derek Olson, Katherine Bassett. "Great to Influential: Teacher Leaders' Roles in Supporting Instruction." Center on Great Teachers & Leaders, American Institutes for Research. 2016, 1 – 28.

Johnson, Susan Moore, and Matthew A. Kraft, John P. Papay. "How Context Matters in High-Need Schools: The Effects of Teachers' Working Conditions on Their Professional Satisfaction and Their Students' Achievement."Teachers College Record. Volume 114 (October 2012), 1 – 39.

Johnson, Susan Moore, Stefanie K. Reinhorn, Megin Charner-Laird, Matthew A. Kraft, John P. Papay. "Ready to Lead, but How? Teachers' Experiences in High-Poverty Urban Schools." Teachers College Record. Volume 116 (October 2014), 1 – 50.

Katzenbach, Jon and Douglas Smith. "The Discipline of Teams." Harvard Business Review Vol. 71 2 (March April 1993) 111 – 120. Reprinted Vol. 83 7/8 (July August 2005) 162 – 171.

Kennedy, Mary. Form and Substance in In-service Teacher Education. Research Monograph No. 13, 1998.

Knowles, Malcolm S., Elwood Holton, Richard Swanson. The Adult Learner. Oxford, England: Butterworth-Heinemann, 1973.

Kraft, Matthew A., John P. Papay. "Can Professional Environments in Schools Promote Teacher Development? Explaining Heterogeneity in Returns on Teaching Experience." Education Evaluation and Policy Analysis. Vol. 36 4 (December 2014), 476 – 500.

Leithwood, Kenneth, Blair Mascall. "Collective Leadership Effects on Student Achievement." Educational Administration Quarterly. Volume 44 (4) (October 2008), 529 – 561.

Leithwood, Kenneth, Doris Jantzi. "The Relative Effects of Principal and Teacher Sources of Leadership on Student Engagement With School." Educational Administration Quarterly. Volume 35 Supplemental (December 1999), 679 – 706.

Leithwood, Kenneth, Sarah Patten, Doris Jantzi. "Testing a Conception of How School Leadership Influences Student Learning." Educational Administration Quarterly. Volume 46 (5) 2010, 671 – 706.

Marks, Helen M., Karen Seashore Louis. "Does Teacher Empowerment Affect the Classroom? The Implications of Teacher Empowerment for Instructional Practice and Student Academic Performance." Educational Evaluation and Policy Analysis. Volume 19 (3) (Autumn, 1997), 245 – 275.

Ogawa, Rodney T., and Steven T. Bossert. "Leadership as an Organizational Quality." Educational Administration Quarterly. Vol. 31 No. 2 (May 1995), 224 – 243.

Owens, Robert G. Organizational Behavior in Education: Adaptive Leadership and School Reform. Eighth Edition. Boston: Allyn Bacon, 2003.

Polzer Jeffrey T. "Leading Teams." Case Note 9-403-094. Boston: Harvard Business Publishing, 2003.

Polzer, Jeffrey T. "Identity Issues in Teams." Case Note 9-403-095. Boston: Harvard Business Publishing, 2003.

Roby, Douglas E. "Teacher Leaders Impacting School Culture." Education. Volume 131 4 Summer 2011, 782 – 790.

Rogers, Carl R., F. J. Roethlisberger. "Barriers and Gateways to Communications." Harvard Business Review. Volume 69 6 (November – December, 1991), 105 – 111.

Schein, Edgar H., Organizational Culture and Leadership. San Francisco: Jossey-Bass, 2010.

Schön, Donald A. The Reflective Practitioner: How Professionals Think in Action. New York: Basic Books, 1983.

Schunk, Dale, Barry Zimmerman. Ed. Self-Regulated Learning: From Teaching to Self-Reflective Practice. New York: Guilford Publishing, 1998.

Sebastian, James and Elaine Allensworth, Haigen Huang. "The Role of Teacher Leadership in How Principals Influence Classroom Instruction and Student Learning." American Journal of Education. 123 (November 2016), 69 – 108.

Silins, Halia, Bill Mulford. "Leadership and School Results." Second International Handbook of Educational Leadership and Administration. Chapter 17, 2002, 561 – 612.

Smylie, Mark A., Sharon Conley, Helen M. Marks. "Exploring Approaches to teacher Leadership for School Improvement." Counterpoint. Vol 408 Teacher Leadership: The New Foundations of Teacher Education – A Reader. 2011, 265 – 282.

York-Barr, Jennifer, and Karen Duke. "What Do We Know about Teacher Leadership? Findings from Two Decades of Scholarship." Review of Educational Research., Vol. 74, No. 3 (Autumn, 2004), pp. 255-316.