Making an Impact Statewide to Benefit 21st-Century School Leadership

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Abstract:

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Keywords: 21st-Century school leadership | systems-wide partnership | technological innovation | professional development

Article:

***Note: Full text of article below

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Abstract

How can institutions of higher education, local education agencies, and departments of education partner to build capacity for 21st-Century school leadership? The model (IMPACT V) we describe utilizes a systems-wide partnership approach to cultivate shared leadership within influenced middle and high schools statewide to leverage technology as a catalyst for school reform. The model supports online cohort-based graduate programming, leadership coaching, ongoing professional development, and technical assistance across the state of North Carolina. This professional commentary describes theory related to the coordinated school–university partnership context. Also discussed are practicalities regarding how this approach prepares practicing school leaders more innovatively for the challenges of 21st-Century leadership.

Keywords

21st-Century school leadership, systems-wide partnership, technological innovation, professional development

Technological innovation calls for leadership practice that anticipates exponential change for which educators (teachers, school administrators, and all school staff) alike must prepare.

In an effort to build capacity for 21st teaching and learning in schools, leaders will need to help teachers use technologies to effect desirable change for learners and help communities understand new approaches to teaching and learning.

A second element of change involves re-familiarizing how everyone (educators, students, parents) conceives of time as a learning resource. Learning occurs 24/7, not just during the school day.

A third change necessitates refashioning how educators think about assessment so that it can be much more authentic, which raises expectations for students as they receive latitude and freedom in producing projects and other assignments.

A fourth change involves helping educators think differently about the tools of learning because traditional tools, such as workbooks and textbooks, paper and pencil, will be replaced by technologies such as computers, smart phones, laptops, and smart boards. Knowledge itself is expanding at a "breathtaking pace" given that "new technical information ... is predicted to double every 72 hours by 2010" (Darling-Hammond, 2010, p. 4).

The future of public education necessitates an approach to technology leadership that fosters robust partnering efforts among schools, universities, and funding agencies. As university faculty who carry responsibility for preparing future school and district administrators, we must implement the

shared goals of school and district administrators and educational entities alongside our partners. We are all being challenged to prepare leaders and PK-12 students for a future that is difficult to grasp and for which we need to link the preparation and research needs of public schools to higher education institutions while preparing future leaders through state-of-the-art interventions (English, Papa, Mullen, & Creighton, 2012).

As such, we must accept the challenge to "rethink education and what it means to be educated in a time of rapid change" (Warlick, 2012, p. vii). Rethinking the classroom and the roles of educators and administrators allows for momentum beyond the limitations of traditional education.

The charge for educational leadership programs then is to prepare "for a new generation of learners within a new information environment for a future that we cannot clearly describe" (Warlick, p. vii).

Digital Education

Becoming critically aware as educators

Challenges of the digital era have profound implications for how we "do" schooling in anticipation of tomorrow's world. Critically aware educators argue that we have no choice but to *disrupt* public education as we know it. Educators who are concerned with issues of power, democracy, and diversity ask critical questions about how marginalized students are being educated, prepared, and funded in America's schools. These educators are aware of the need to educate all students to high expectations for academic performance.

Disrupting education means pushing past traditional ways of thinking, interrupting routines of practice, and unsettling the work of teachers and students to stimulate new ways of learning, organizing schools, and thinking about the purposes of education. As Darling-

Hammond's (2010) data-based trends attest about these ideas, "The new mission of schools is to prepare students to work at jobs that do not yet exist, creating ideas and solutions for products and problems that have not yet been identified, using technologies that have not yet been invented" (p. 2).

Using digital tools in teaching

Classroom teachers must prepare students for their global futures by using digital tools to help achieve key educational goals (Christensen, Horn & Johnson, 2008; Zucker, 2008). Effective and thoughtful uses of digital tools allow students the "opportunity to interact with their educational world in a way that most closely mirrors the rest of the society" (Lehmann & Livingston, 2012, p. 76). The digital revolution in schools can help deliver on the promise of transforming education for all stakeholder groups (McLeod & Lehmann, 2012).

Redesigning teaching and learning

The magnitude of these technological changes in schools is unparalleled: "The limitations of space, pace, and time have been dissolved with today's anytime, anywhere, on-demand work spaces and high-tech tools designed to help us synergize our talents and passions" (Sabella, Valesky, & Isaacs, 2012, p. 125). By 2014, a predicted 22 million learners will take online coursework (Asselin, 2012).

Online teaching is about "more than translating what we do as instructors in a face-to-face (f2f) format to an online learning interface and platform . . . Creating impactful and successful 21st-Century online programs entails radically redesigning teaching and learning" (Hewitt, Lashley, Mullen, & Davis, 2012, p. 49).

Christensen, Johnson, and Horn (2008) predict that within a decade half of all courses

at the high school level will be delivered online and that a customized personalized approach to learning will maximize student success. They are not projecting that 50% of students will be taught outside of schools but rather that 50% of coursework will be taken online at school. The teacher's dramatically changing role will be to supervise, tutor, assist, and mentor the online learner.

Digital Leadership

Such profound and rapid change at all levels of teaching, learning, and leading requires specialized leadership: "Issues of instructional strategies, classroom materials, professional development, hardware and software acquisition, data-based decision tools, and security require a knowledgeable leader/manager and an institutionalized commitment to appropriate cutting-edge technology usage" (Brown, 2011, p. 55).

Not only does technology leadership require new knowledge and skills, but it also necessitates a fundamental shift in leadership to become participatory and collaborative.

Because of the infusion of technology in our schools, leadership as we presently know it will experience further transformation. The gap between autocratic and participatory leadership must grow even wider if we are to successfully use technology for maximizing teaching and learning (Creighton, 2011).

Leading with technology innovators

Creighton (2011) attests that technology initiatives in schools often yield in-groups and out-groups. A problem is that "in-groups are usually composed of technology consultants and coordinators partnered with teachers possessing adequate to exemplary skills and interest in using technology" (p. 15), whereas out-groups lack the necessary expertise and commitment. A school technology team ("in-group") is a collection of school personnel who

are interested in technology utilization and who experience professional development about technology implementation. This group becomes the "go to" for the school staff in that it contains the key technology users and innovators within the environment or learning domain. This group's task is to introduce technology utilization to the remainder of the school staff while advocating for the adoption of widespread technology innovation.

The "out-group" contains personnel who are unfamiliar with technology, slow to adopt, resistant, or committed to other innovations. Effective technology leaders address this in-group/out-group disjunction so that cliques do not form and they promote participatory leadership and collaboration among faculty and staff beyond the building level.

Building leadership capacity

Leadership preparation must cultivate leaders' ability to respond innovatively to these new demands for technology leadership. The IMPACT V model we briefly discuss is an innovative partnership approach to building leadership capacity within and beyond school campuses to leverage technology as a catalyst for educational reform.

To set the context, we describe how leadership preparation faculty can build capacity for school and classroom leadership in schools with the highest need. *Impact V: Building 21st-Century School Leadership* reflects our commitment as scholars and practitioners to work with 12 such schools across North Carolina. Our goals as a faculty leadership team revolve around the conceptualization and intent of this 2-year project (Year 2 concludes summer 2013). The focus is 21st-Century public school leadership development through a fully online Specialist

in Education (EdS) degree. Pedagogical delivery, a team approach to instruction, f2f and online individualized coaching, and partnerships with schools, districts, consortia, and agencies are all vehicles that were identified for satisfying statewide goals through the IMPACT V grant project.

Theoretical Compass

Identifying some unresolved issues

Schools and universities have a history of acting as separate entities for which symbiotic, coordinated school–university partnerships are strongly advocated as a remedy.

The value of connected, systems-wide partnerships has been well established, as in: "Policy makers and others hope that ... educational partnerships can generate the innovative thinking and systematic actions necessary" (Clifford & Miller, 2008, p. 3) for educational reform.

Whereas many researchers, practitioners, and policymakers promote the benefits of partnerships among educational entities, there is no unified understanding of what these partnerships should look like or how they can best be structured: "Writers frequently make the case for building stronger working relationships between schools and universities, but a coherent and commonly accepted framework for understanding partnerships remains elusive" (Baker, 2011, p. 41).

Indeed, even the terminology around partnerships is variable, if not confusing. Clark's (1988) list of partnership terminology makes the point, citing such terms as network, consortium, collaboration, inter-organizational agreement (IOA), collective, and cooperative. He concludes that "different terms are used to describe similar activities, and on the other hand, different meanings are attached to the same term" (p. 33).

Outlining partnership characteristics

Despite inconsistencies in the terminology and understanding of what constitute partnerships, Baker (2011) identifies six characteristics of successful partnerships:

- (a) focusing on the common purpose of teacher and student learning;
- (b) monitoring top-down arrangements in favor of greater mutuality;
- (c) developing boundary spanning roles that assure continuity and sustain commitment;
- (d) creating a climate of commitment and accountability for all partners;
- (e) fostering trustworthy relationships between and among all actors; and
- (f) making sound plans for crucial support of key resources—fiscal, space, and personnel. (p. 43)

As systems-wide partnership advocates, we concur with Baumfield and Butterworth (2007) that partnerships are enlivened through "radical collegiality" that supports "teacher to academic dialogue in the process of mutual transformation" (p. 411).

Describing a partnership taxonomy

Specifically, Baker's (2011) taxonomy encompasses single-tier, multi-tier, and complex-brokered partnerships. Single-tier partnerships involve university faculty working directly with classroom teachers to provide technical expertise.

In contrast, multi-tier partnerships involve active participation by many actors at various levels of authority and decision-making. Professors and teachers are still involved, but many others have joined the partnership. The focus has shifted away from primary interest in the classroom to a more complex consideration of both the classroom and the whole school. Greater interest from the district translates into new responsibilities and

duties for principals (Baker, 2011).

Importantly, as Baker attests, multilevel partnerships connect professional development and school improvement, which leaders of these initiatives agree are strong values.

Although in single-tier and multi-tier partnerships the "expertise for professional development is located squarely inside the university," in a complex-brokered partnership "university leaders ... hire experts who bring their expertise to both university and P–12 educators" (Baker, 2011, p. 55).

From this perspective, systems-wide collaborative initiatives like IMPACT V are complex-brokered partnerships. Practitioners from outside the partnership network who have desirable expertise (in the case of IMPACT V this is school coaching and innovative technology specializations) are integral to the team.

Practical Compass

As revealed, IMPACT V theoretically embodies a complex-brokered partnership approach to school reform. The focus of the IMPACT V model is to build leadership capacity with the building principal and teachers so that school staff can leverage technology as a catalyst for change. Partnership among the NC Department of Public Instruction (NCDPI), state institutes of higher education (IHEs), expert technology leadership executive support coaches, and local education agencies/school districts (LEAs) channels the support for educators to cultivate and strengthen leadership capacity.

The model links three domains of reform: leadership development, coaching, and technology leadership.

IMPACT V: Contextual Evolution

IMPACT V itself is the fifth iteration of sustained efforts by the NCDPI's Division of Instructional Technology to use technology for improving student learning. Program evaluation components for IMPACT V draw upon findings from previous models to inform greater effectiveness in subsequent iterations of IMPACT.

Major lessons from IMPACT I and II were that sustainable change involving technology requires more than funding for the technology itself (infrastructure, hardware, software, and peripherals) and initial professional development about the technology and how to use it instructionally.

IMPACT III, therefore, included a coaching component to help participating school teams translate professional development into changed pedagogy. IMPACT IV demonstrated that even coaching and high-quality professional development are insufficient for sustained improvement without a vision of strong principal leadership and technology as a change catalyst.

Additionally, prior iterations of IMPACT revealed that public school staff need ongoing technical support. As such, IMPACT V focuses on building technology leadership capacity for a team of school leaders, including the principal or assistant principal, a team of teacher leaders representing core content areas, the media specialist(s), and the district technology director.

This team is responsible for leading efforts within the schools to develop and implement an action plan for school-wide

improvement that leverages technology to transform the way teachers teach and students learn.

IMPACT V: curricular focus

As a faculty group at a High Research Activity Carnegie institution in North Carolina, we take seriously the preparation of practicing school leaders more innovatively. The curricular focus that propels this online leadership preparation initiative emphasizes three major goals:

- (1) engaging in leadership development through coursework, institutes, and enrichment activities within a social justice framework (Normore, 2008);
- (2) promoting practice-based leadership coaching through internship experiences, with the aim of modeling school team/democratic decision making and empowerment in schools (Papa & Papa, 2010), and
- (3) anchoring these goals through school improvement specifically aimed at technology leadership throughout the system (Schrum & Levin, 2009).

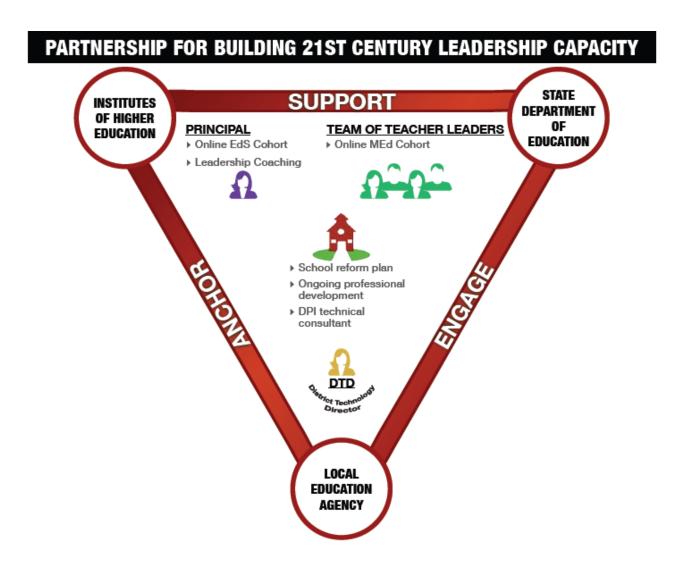
Impact V has positioned technology integration as a strategy for school improvement.

Model components

The IMPACT V model creates partnerships among NCDPI, IHEs, and LEAs. These entities coordinate for the purpose of supporting select schools as each building staff engages in developing leadership capacity through technology as an influencer of change.

Figure 1 illustrates this project-based intersection of coordinating entities.

Figure 1. Partnership for building 21st-Century leadership capacity.



Program participants

School staff eligible to apply for IMPACT V funding included all highly influenced middle and high schools without instructional technology and/or curriculum support, serving populations from families in poverty qualifying for free and/or reduced meal prices.

The eligible schools qualified to receive other financial support, such as Title 1 funding. Selected schools are not classified by the state as a *priority* school. Because they are not deemed low performing on state assessments, the staff in them do not receive the state's *school transformation support*.

Additionally, all school members in the partnership experience are influenced by compounding challenges. These include high teacher turnover rates; principals fairly new to their role; inability to hire highly qualified staff or employ instructional technology or curriculum support personnel; changing demographics; large concentrations of English Language Learners; and—in some cases—physical remoteness in rural counties. All school personnel that met these criteria were invited to apply for the program; in total, 12 schools within 9 LEAs were selected to participate.

The school's IMPACT V project team has responsibility for leading efforts to develop and implement a school improvement action plan focused on reform through technology.

To mobilize this team capacity, the teacher leaders participate in a cohort-based, fully online masters in instructional technology program from a sister institution that focuses on leadership development, instructional technology, and sound pedagogy through technology. The principal or assistant principal (AP) for each school joins a cohort-based, fully online EdS program, delivered through our department. The program focuses on leadership coursework within a culturally relevant schooling framework supported by data-based trends in education (e.g., courses that focus on critical perspectives in education, leadership, and culture). In addition, the entire team including the district technology director and the media specialist(s) participate in professional development activities provided by NCDPI instructional technology consultants.

Principals and APs also participate in leadership development institutes every other month at our university that guide them to analyze their own leadership styles, strengths, and growth areas. They develop a personal

professional growth plan to lead this type of reform initiative.

Additionally, their coaches, each of whom has extensive experience as an on-site and system technology leader, visit these building leaders at their campuses monthly during the first year and every other month during year 2.

Coaches help principals reflect, problem-solve, and assess progress on their personal professional goals as well as the school's IMPACT V improvement action plan. Coaches encourage the brokering of identified needs to various entities—senior-level district leadership, district technology leadership, community agencies, and NCDPI consultants, aiming to support sustainability. Thus, these experts guide principals/APs to apply the culturally relevant and substantive leadership development and coursework they are receiving.

Each participating school focuses on implementing and assessing its improvement action plan and receives ongoing IMPACT technical assistance from the NCDPI consultants. Of grant funds awarded to each school, 25% must be allocated for professional development of all school faculty, including but not limited to a train-the-trainer leadership approach by the IMPACT V leadership team.

The IMPACT V model counters the dominant culture of isolation in schools by emphasizing collaborative work at the micro and macro levels. At the building level, the IMPACT V leadership team meets regularly and collaboratively oversees the school improvement action plan, designs professional development for the school, and leads the entire implementation effort. At the macro level of the program, NCDPI, IHEs, and LEAs work together to provide the fullest range of support

possible for school staff to enact substantive and enduring change.

For example, LEAs extend support by supplying policies and procedures needed by IMPACT V schools, including enhanced acceptable-use policies that feature proactive segments about the use of tablet computers as personal learning devices. NCDPI provides direction, support, curricular resources, and technical expertise to the district and/or school. The IHEs are shifting their programs to offer responsive, relevant, and coordinated coursework.

Leading this effort, faculty members from two accredited universities in North Carolina have been coordinating the research courses for the educational leadership (EdS and Masters in School Education [MEd]) degrees. The principal/AP and teacher leaders cooperatively carry out the culminating project for both programs—an action research project directly related to the school improvement plans.

Grant support

IMPACT V funds to the participating schools included a Year 1 allocation of \$186,000 for technology infrastructure, hardware and software, and professional development. Year 2 allocations, based on average daily membership, ranged from \$92,000 to over \$300,000. The grant also covered within the designated allotments financial coverage allowing each school's leader to earn an EdS in our university program and its teacher-leader team (i.e., of four core teachers) to earn a master's in instructional technology, which another university in the state is fulfilling.

Participants were candid that the financial incentives for themselves and their school staff for joining the IMPACT V

partnership influenced their commitment to the program.

Takeaways from the Partnership: Year 1

Our experiences as faculty leaders responsible for planning and implementing the educational leadership components of this coordinated statewide partnering effort have yielded important lessons about working together, preparing for and sustaining leadership, and experiencing technology as a vehicle for school change.

Four major takeaways from our joint reflection about this program follow.

Encouraging involvement by partners

Greater involvement by schools, universities, and public agencies is better than lesser involvement. The bureaucratic structures in 20th-Century hierarchical systems impede innovation and change in the school and specifically in the classroom to influence student achievement, motivation, and engagement.

The Director of Instructional
Technology at the NCDPI developed IMPACT
V in consultation with key individuals from
institutions of higher education and regional
technology consultants who had played
important roles in prior iterations of the
IMPACT program model. As such, the model
was created to include partnerships among the
state Department of Education, local education
agencies, and institutions of higher education.

Because of the way the model was developed, it was originated and rolled out in an expedited "top down" fashion. Thus, it lacked the benefit of grassroots participation from school personnel in particular.

Due to funding timelines and various pressing state-level internal demands, expediency clashed with bureaucratic IHE structures leaving school/district staff applying for and implementing a program initiative still under development. Innovation, change, "breaking down" barriers, and "molding" bureaucracies require dedicated forward-thinking partnerships that reach across macro and micro levels.

Greater involvement from the program's inception would have set a firmer foundation for innovation in the schools, assured district support, and clarified working parameters among the partners.

Fostering school control

The success of an educational technology innovation depends on a school's staff sense that it is in control of its own participation and school-wide directional change. Likewise, district-level leadership and support are essential to the viability of initiatives that school personnel select.

Although in many instances the decision to apply for and participate in the IMPACT V program was made at the building level with district support, leaders in several participating school staff were unaware that their district technology director was applying for the program on their behalf. In these cases, the decision to participate in the program was made exclusively at the district level, and as such not all school educators involved in the program had strong support for it at the outset in their buildings.

Because IMPACT V is a school-level change initiative and because the participating school staff already experience significant uncertainty on a daily basis, site-based administrators and teachers must be integrally involved in planning processes.

When educators faced the challenges evident in these schools, district leaders tried to access every possible resource. In some cases, these efforts overwhelmed the school and ran counter to their good intentions. The same was true for several of the school staff that opted to participate without the direct knowledge of senior-level district leadership.

The school's educators wanted the additional funding to support teaching and learning without thoroughly vetting the political or district-level support needed for bringing about substantive change.

School-level educators need the support from district leaders so they can attract the infrastructure and technical support required for technology integration and inclusion. Without appropriate understanding and planning in district administration for this type of initiative, school staff face roadblocks for satisfying the desired goals.

Identifying motivations for participation

Ascertaining school personnel's motivations for engaging in change-based initiatives plays a role in determining where to focus resources. For some participating educators and particularly for the leadership team whose graduate programming was grant supported, financial benefits were the primary motivation for program participation, not the use of technology as a catalyst for substantive school reform. Likewise, some school leadership teams saw the funding source as a means to purchase more technology equipment for their school without consideration of the time commitment required of high-quality professional development—i.e., coursework, coaching, leadership institutes, and NCDPI professional development requirements leaving some funded team members overwhelmed and overcommitted. Untangling the motive to access funding from the motive

for change requires serious study before project implementation.

Maintaining strong communication

In any collaboration, the need for high levels of communication among partners cannot be underestimated. A unified vision with shared goals that allows for creative and adaptive strategies must be effectively communicated to all constituents.

Ongoing communication among the program partners (DPI, IHEs, and LEAs) has been difficult to establish and maintain. Also, the different interpretations by partners of the project's vision and goals have led to frustrations and inconsistencies.

The different entities do not always know what each other is doing or who to turn to for answers to questions. This lack of strong, consistent, and visible coordination coupled with a focused vision undergirded by shared goals is a continuing concern amongst partners and participating school personnel.

Steps are being taken to ensure that all partners are involved in ongoing dialogue and are informed of important steps and changes. For example, all partners recently together created a focused vision with shared goals and key steps for year 2 of the project. In addition, staff from NCDPI were selected and assigned specific responsibilities for overseeing and providing direction as well as communication for various components of the initiative.

In order to ensure maximum success and sustainability of the desired change, collaboration and communication are the responsibility of all partners involved in the project. Collaborating partners should look to the breakthroughs that information technology, social networking, and web-based conferencing

offer for possible communication modes. Hightech communication has the added benefit of teaching school personnel about the world their students will soon shape.

Heading into the Next Phase: Year 2

A fundamental purpose of schooling is stretching beyond accountability toward innovation, creativity, critical thinking, and empowerment. The IMPACT V project brings the school and university together with other partnering entities to offer opportunities for improvement in schools that have been stigmatized as failing.

The merger of preparation programs with the challenges of practice in these schools allows for community engagement and activism that promises to make a difference.

Whereas the project we describe was certainly strengthened through grant funding, readers should be encouraged that such partnering changes are possible with strong collaboration and therefore not predicated on external funding.

Funding for technology hardware and some professional development is a necessity for school change; however, in our opinion external grant funding is not a requirement for achieving the scale of changes we have described.

If a school or district staff decides to create change through technology utilization, funds for purchasing equipment, software, and training time will need to be found. Various local and state sources as well as federal funding have funded many of these projects.

For the context described in this essay, the grant facilitated two major goals: (1) it provided the technology funding and hardware as well as the professional development needed for the schools (training, laptops, etc.); and (2) the funding provided the additional incentive for involvement by practicing school principals and teachers to enroll in advanced coursework and thus experience professional development in technology knowledge and skills, and collaboration and participation.

We have learned together just how chaotic school improvement can be and think that strong communication systems offer an antidote to the confusion participants experience. We see that appreciation is deepening of the people who are a school's greatest resource.

Investing in these synergists creates possibilities and hope for better school

environments, which has meaning for district superintendents who can get ideas from the program we have described for their own contexts.

We look forward to learning more during year two of this project about how to benefit 21st-Century school leadership. How are others currently organizing programs for school improvement through technology innovation?

Are other program reformers also connecting leadership development, leadership preparation, and school improvement? If so, how? What do the most productive partnerships for school reform look like?

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