Leading change: A phenomenological study of principals’ experience in 1:1 computing

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Research on 1:1 Computing

• Positive correlations with student outcomes-achievement, absenteeism, discipline (e.g. Dunleavy & Heinecke, 2007; Rosen & Beck-Hill, 2012).

• Increased student-centered learning (e.g. Lowther, et al., 2012; Mouza, 2008; Rosen & Beck-Hill, 2012).

• Fidelity of implementation impacts success (e.g. Duleavy, Dexter, & Heinecke, 2007; Inserra & Short, 2012).

• Professional development impacts implementation (e.g. Claro et al., 2012; Storz & Hoffman, 2013).

• Effective leadership is critical (Alberta Education, 2010; Edwards, 2014; Learning Cultures Consulting, 2006)
Research on Technology Leadership

• Principal leadership impacts technology integration (Chang, 2012).
• Successful programs require planning and support, curriculum and instruction practices, vision, school culture, professional development, funding, and partnerships (Levin & Schrum, 2013; Sincar, 2013; Holt & Burkman).
• Leadership responsibilities: vision, professional learning, and modeling technology use (e.g. Cakir, 2012; Chang, Chin, & Hsu, 2008; Weng & Tang, 2014)
• Distributed leadership and transformational leadership are effective styles (Afshari et al., 2012; Levin & Schrum, 2013, Petersen, 2014).
• International Society for Technology in Education Standards for Administrators (ISTE*A): Visionary Leadership, Digital Age Learning Culture, Excellence in Professional Practice, Systemic Improvement, and Digital Citizenship
Research on Change

• Change is a process (Lewin, 1997; Kotter, 2012; Bridges, 2003; Rogers; 2003, Fullan, 2007).
  – Initiation, Implementation, Institutionalization

• First-order change is incremental and consistent with norms; second-order change is an irreversible, dramatic departure (Cuban, 1988; Marzano et al., 2005)

• Responsibilities for second order change: Change Agent; Flexibility; Ideals and Beliefs; Intellectual Stimulation; Knowledge of Curriculum, Instruction, and Assessment; Monitor and Evaluate; and Optimizer (Marzano et al., 2005)
“Neglect of the phenomenology of change – that is how people actually experience change as distinct from how it might have been intended—is at the heart of the spectacular lack of success of most social reform” Fullan (2007).
Problem

• Assumptions and generalizations drive professional development and the design of support systems for principals.

• Program decisions are being made without truly understanding the lived experience in this context.
Purpose

• To build an understanding of principals’ experience in leading the changes associated with a 1:1 initiative and the contexts or situations that influence those experiences
Research Questions

• What is the experience of principals leading change in a 1:1 computing initiative?
  – How do principals view their role and responsibilities in leading change in a 1:1 initiative?
  – How do principals promote change in their schools in a 1:1 initiative?
  – How do principals’ respond to successes and challenges in a 1:1 initiative?
Research Design: Phenomenology

• Emphasizes understanding human experience and consciousness without presuppositions (Moustakas, 1994).
  – Essence
  – Transcendental phenomenology

• Phenomenology studies affective and intense human experiences (Merriam, 2009); change is a highly emotional experience (Bridges, 2003; Fullan, 2007).
Conceptual Framework

Pedagogy

Change Knowledge

Stratosphere

Technology
## Discipline Specific Framework

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<tr>
<td>Knowledge of Curriculum, Instruction, and Assessment: Is knowledgeable about current curriculum, instruction, and assessment practices (p.43)</td>
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<tr>
<td>Optimizer: Inspires and leads new and challenging innovations (p.43)</td>
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<td>Intellectual Stimulation: Ensures faculty and staff are aware of the most current theories and practices and makes the discussion of these a regular aspect of the school’s culture (p.42)</td>
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<td>Change Agent: Is willing to and actively challenges the status quo (p.42)</td>
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<td>Monitoring/Evaluating: Monitors the effectiveness of school practices and their impact on student learning (p.43)</td>
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<td>Flexibility: Adapts his or her leadership behavior to the needs of the current situation and is comfortable with dissent (p.42)</td>
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<td>Ideals/Beliefs: Communicates and operates from strong ideals and beliefs about schooling (p.42)</td>
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| ISTE Standards Administrators (2009)                                                                                                           |          |            |        |
| 1.a: Inspire and facilitate among all stakeholders a shared vision of purposeful change that maximizes use of digital-age resources to meet and exceed learning goals, support effective instructional practice, and maximize performance of district and school leaders | X        | X          | X      |
| 1.b: Engage in an ongoing process to develop, implement, and communicate technology-infused strategic plans aligned with a shared vision       | X        |            |        |
| 1.c: Advocate on local, state and national levels for policies, programs, and funding to support implementation of a technology-infused vision and strategic plan | X        | X          |        |
| 2.a: Ensure instructional innovation focused on continuous improvement of digital-age learning                                               | X        | X          |        |
| 2.b: Model and promote the frequent and effective use of technology for learning                                                                | X        | X          |        |
| 2.c: Provide learner-centered environments equipped with technology and learning resources to meet the individual, diverse needs of all learners | X        | X          |        |
| 2.d: Ensure effective practice in the study of technology and its infusion across the curriculum                                               | X        | X          |        |
| 2.e: Promote and participate in local, national, and global learning communities that stimulate innovation, creativity, and digital age learning culture | X        | X          |        |
Setting and Participants

- Large Mid-Atlantic school district
- Majority minority system: 51.5% of students of Asian, African American, or Hispanic/Latino descent
- 8 elementary school principals
- Convenience Sample
- Schools reflective of district’s diversity: geography, socioeconomic status, unique cases
Data Collection

• Journals
  – Prompts based upon conceptual framework

• Semi-Structured Interviews
  – Questions based upon Moustakas (1994) and Perry (2013)
  – Customized questions based on journals
Limitations

• Specific Context
• Convenience Sampling
• Timeline
• Participant Researcher
Data Analysis: Modified VanKaam

Phenomenological Reduction

1) Horizontalizing
2) Reducing and eliminating to invariant constituents
3) Clustering and Labeling

Individual Textural Descriptions: The “What”

Imaginative Variation

4) Varying possible meanings, identifying underlying themes or contexts, and recognizing universal structures that precipitate feelings or thoughts

Individual Structural Descriptions: The “Why”

Synthesis of Meanings and Essences

5) Developing Composite Textural Descriptions
6) Developing Composite Structural Description
7) Synthesizing Composite Textural and Structural

Composite Themes: The Essence
Data Analysis: Modified VanKaam

- Prior experiences impacted their leadership
- Overall feelings about the experience were positive
- Risk-taking was valued, promoted, and supported
- Instructional leadership was a key responsibility
- Collaboration was valued and fostered

Composite Themes: The Essence
Data Analysis: Modified VanKaam

- Fulfilling the responsibility of Optimizer
- Acting as a Change Agent
- Ensuring educational innovation in digital age learning
- Facilitating and participating in learning communities
- Establishing and leveraging partnerships
Final Synthesis

• Essence: “The condition or quality without which a thing would not be what it is” (Moustakas, 1994)
  – Collaboration
    • Challenging the Status Quo
    • Inspiring and Driving Change
    • Changing Instruction
    • Building Networks and Learning Communities
Challenging the Status Quo

We really foster risk-taking [through] the collaborative process when we plan together.
–Carol, Reagan ES

At faculty meetings we [...] share out [...] It was an opportunity for us to [...] celebrate failures as well as successes, because we learn from failures.
–Ann, Kennedy ES

We took a “Learning Walk” [...] Our entire staff walked into every classroom as teachers and grade levels shared [...] the different ways they had embraced student-centered learning.
–Lisa, Washington ES

The relationship you develop with them in terms of collaborating [...] directly affects how successful you are in rolling out a plan.”
–Gerald, Roosevelt ES
Inspiring and Driving Change

I didn’t decide. [It was] a decision that our entire faculty needed to be involved in.
– Gerald, Roosevelt

I'm one of the people at the table. I'm not the person at the table.
– Dottie, Jefferson ES

I'm learning with them. I don't know more than they do [...] We're in this all together to figure this out.
– Lisa, Washington ES

It’s okay to be where you are, you just can’t live there.
– Ann, Kennedy ES

I said [...] to my teachers on day one [...] If you stop moving, I am going to push you. But if you are stepping forward the whole time, no one can tell you you're not moving fast enough.
– Brian, Truman ES
Changing Instruction

[The AP and I are] rolling our sleeves up and jumping in [...] co-teaching with teachers and keeping ourselves grounded with what’s actually happening in the classroom.
– Tiffany, Lincoln ES

[Being] collaborative is so important because you have to have [...] trust with your teachers [so] that you can give them feedback [...] and they'll be okay with it.
– Carol, Regan ES

Any teams that weren't already collaboratively working, we made it a priority [...] If your grade level is strewn about the building [...] then you can't collaborate truly.
– Brian, Truman ES
Building networks and learning communities

I think we're a strong community, and I think I'm a stronger leader because they've made me a stronger leader.  – Lisa, Washington ES

I find myself teaming up with the technicians, electricians, [...] company reps, etc. to learn all that I can [...] Collaboration [...] is the lifeblood of what is going to make this process work.  – Dottie, Jefferson ES

It has been valuable to team up with another school for [PD] so that teachers can discuss their approach to pedagogy with teachers from different environments.  – Russell, Eisenhower ES

I know it sounds silly, but [...] just knowing there was always someone I could call and ask a question. That was important.  – Carol, Regan ES
Discussion of Results: Consistencies with Current Research

• Instructional Leadership
  – Professional Development (e.g. Chang et al., 2008; Plessis & Webb, 2012; Eren & Kurt, 2011; Levin & Schrum, 2013; Fullan, 2014)

• Acting as a Change Agent
  – Implementing Change (e.g. Cakir, 2012; Levin & Schrum, 2013; Fullan, 2014)

• Collaboration (e.g. Greaves et al., 2010; Fullan, 2007; Rodgers, 2003)
Discussion of Results:
Counterpoints and New Perspectives

• Discipline Specific Framework
• Vision Setting (e.g. Levin & Schrum, 2013; Kotter, 2012; ISTE, 2009; Topper & Lancaster, 2013)
• Technology Use and Modeling (e.g. Greaves et al., 2010; ISTE, 2009)
Future Research

• Replicate with additional principals
  – Mandated implementation
  – Middle School & High School

• Planning and providing professional development

• Correlation between principal leadership and student outcomes
Considerations for Districts

• How does the implementation timeline support principals beginning the change process prior to device delivery?
• How are collaborative relationships fostered? What support networks are in place?
• What professional development is needed for principals to continue growing as instructional leaders?
• What messages, either overt or implied, support or inhibit risk-taking and innovation?
• What is principals’ understanding of the change process?
• What strategies do principals’ have to respond to challenges? What professional development is needed?