Leadership in 3-D: Diagnosis and Design from A Distributed Perspective

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The Distributed Leadership Studies
http://www.distributedleadership.org

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Overview

- Anchoring work on leadership and management in the organization’s core technical work.

- Getting beyond an ‘implementation mindset’ to engage in Diagnosis and Design from a Distributed Perspective.

- Leading Organizational Infrastructure Redesign to Improve Practice: Ties, Trust, and Transformation.
Anchoring Diagnosis and Design in Human Development Practice
Performance

• Knowledge X Motivation X Situation = Performance
The Work of Human Improvement

• Uncertain or contested ends and means
• Mutual dependency
• Unpredictability of practitioner-client interactions
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The Circumstances of Human Development Work

- Pluralistic Institutional Environment
- Involuntary Clients
- Accept everyone who enters
- Practitioners belong to professions
The Realities of the Denotative Leader’s Life

“Every time I came in this office... it was someone waiting, needing something from me, needing an answer,... from the parents to the students to the teachers; everyone at every moment ... overwhelming”

Angela

“Being a good principal is like dancing that wonderful tango, blindfolded, yet serving lunch, breakfast and dinner on skates to 500 people,” [each of whom has] ordered something different” [and each of whom] “brings...their own set of dynamics, personalities, that you have to be acutely aware of in order to serve them.”

Adriana
Anchoring Leadership

Students’ Opportunities To Learn

Teaching

What gets taught?  How is it taught?

Leading and Managing
Teaching as a Social Practice

- Teacher
- Materials
- Students
- Context
Teaching and Leadership

- Teacher
- Materials
- Students
- Teaching Practice

Context
The Subject Matters - Language Arts

Kingsley Elementary School: Instructional Interactions about Literacy
The Subject Matters - Mathematics

Kingsley Elementary School: Instructional Interactions about Mathematics
The Subject Matters - Science

Kingsley Elementary School: Instructional Interactions About Science
A System View: Instructional Advice and Information Interactions

English Language Arts

Mathematics
School and School Systems: Science
Diagnosis and Design from A Distributed Perspective
“We have one hunter and one gatherer... everyone else is a consultant”
Diagnosis and Design

- **Diagnosis** = identify nature or cause of something
- **Design** = shaping the organization and system infrastructure to purposes
Diagnosis and Design in Practice

“Every time I came in this office… it was someone waiting, needing something from me, needing an answer, … from the parents to the students to the teachers; everyone at every moment … overwhelming”

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Adriana
The Leader-Plus Aspect

• The Leader-Plus Aspect:

• The principal often works with others when performing leadership and management tasks

• At times other formally designated leaders take responsibility for leadership and management tasks

• And, individuals with no formal leadership designations often have a hand in leading and managing instruction
An Alternative to the ‘Heroics of Leadership’ Genre

"Initially I tried to do it all. I was trying to do it all and that was impossible. You cannot be all things to all people... I don’t know everything about everything."

Principal Johnson
A Distributed Perspective: The Practice Aspect

Leaders
Administrators, Specialists, Teachers, Parents, Students

Leadership Practice is in the interaction

Situations
Tools, Routines, Structures, Rules

Followers
Teachers, Administrators, Specialists, Students, Parents
A Distributed Perspective

• A diagnostic framework that draws attention to particular dimensions of leadership & management

• A design framework for guiding leadership and management improvement efforts
Leading Infrastructure Redesign to Improve Practice: Trust, Ties, & Transformation
Social Capital, Knowledge Development, & Improving Human Development Practice

• Definition

• ??

• ??

• ??
Why focus on advice and information interactions?

- Social relations as a source of resources such as trust, expertise, opportunities for joint sense-making, and incentives for innovation

- On-the-job interactions are associated with the transfer of advice and information — essential in the development of new knowledge

- Strong associations between school norms (e.g., social trust, collective responsibility, collegiality) and student outcomes, but little empirical knowledge of how to create these norms...

Blau, 1957; Bryk & Schneider, 2002; Coburn, 2001; Daly & Finnigan, 2010; Elmore, 1996; Eraut & Hirsh, 2007; Frank, Zhao, & Borman, 2004; Hill, 2004; Little, 2002; Smylie, 1995; Spillane, 2004
Formal Organizational Structure and Teaching Advice & Information Interactions

- Teachers more likely to seek advice from others of same gender and race
- Prior tie strongly associated with having a current tie
- Formal leaders more likely to provide advice or information
- Teachers in the same grade more likely to receive or provide advice or information
- Teachers more likely to seek advice about a subject from teachers who reported more PD in that subject

Infrastructure
Organizational Routines

- Organizational Routines are “repetitive, recognizable patterns of interdependent actions carried out by multiple actors.” (Feldman & Pentland, 2003)
Why Organizational Routines?

- Pragmatic reasons:
  - Popular mechanism in instructional reform efforts
  - Key external reform lever (e.g., Comprehensive School Reform Models)

- Conceptual reasons
  - Focus attention on patterned interactions
  - Provide frame for examining relationship between structure, agency, and practice
  - Involve cognitive, normative, and regulative dimensions
Leading Teaching and Learning by Designing Organizational Routines

- **Adams School**: Breakfast Club, Grade level meetings, Teacher Talk, Teacher Leaders, Five-Week Assessment, Literacy Committee, and Mathematics Committee.
- **Baxter School**: Cycle Meetings, Leadership Team Meetings, Literacy Committee, Math/Science Committee.
- **Kosten School**: Report Card Review, Grade Book Review, Lesson Plan Review, Faculty Meetings, Grade Level Meetings.
- **Kelly School**: Skill Chart Review, Professional Development.
## Organizational Routines at Adams School

<table>
<thead>
<tr>
<th>Functions</th>
<th>Tools</th>
<th>People</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Five Week Assessment</strong></td>
<td>Formative evaluation Teacher Accountability Monitor Instruction Teacher Development</td>
<td>Standardized Tests Standards Student Assessments</td>
</tr>
<tr>
<td><strong>Breakfast Club</strong></td>
<td>Teacher Development Build Professional Community</td>
<td>Research Articles</td>
</tr>
<tr>
<td><strong>School Improvement Planning (SIP)</strong></td>
<td>Identify Instructional Priorities &amp; Resources</td>
<td>Previous Year SIP District Guidelines Test Score Data</td>
</tr>
<tr>
<td><strong>Classroom Observations</strong></td>
<td>Teacher Development Monitor Instruction Accountability</td>
<td>School Protocol District Protocol</td>
</tr>
<tr>
<td><strong>Real Men Read</strong></td>
<td>Student Motivation and Support</td>
<td>Books</td>
</tr>
<tr>
<td><strong>Language Arts Coordinator</strong></td>
<td>Assistant Principal Principal Teachers</td>
<td></td>
</tr>
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<td><strong>Language Arts Coordinator</strong></td>
<td>Assistant Principal Principal Teachers</td>
<td></td>
</tr>
<tr>
<td><strong>Admin-staff</strong></td>
<td>Principal Administration Teachers (approved LSC)</td>
<td></td>
</tr>
<tr>
<td><strong>Community Members</strong></td>
<td>Principal Assistant Principal</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- **Functions**
  - Formative evaluation
  - Teacher Accountability
  - Monitor Instruction
  - Teacher Development
- **Tools**
  - Standardized Tests
  - Standards
  - Student Assessments
- **People**
  - Language Arts Coordinator
  - Assistant Principal
  - Principal
  - Teachers
  - Language Arts Coordinator
  - Assistant Principal
  - Principal
  - Community Members
A Historical View from the Field

Everybody did absolutely their own thing as far as literacy. Some people used the Basal series ... we had different Basal series going in the building. A lot of people were going to a literature-based instruction. Nobody ever talked to each other. It was just - everybody went into their own room, closed the door and did their own thing."

(Adams Principal)

“There may be four classes at a grade level and they did not even talk. They did not have a clue at what was going on in each other's classrooms ...”

(Baxter Teacher)

When I first started in 1991 [the principal] was very, very laid back, and we had a lot of creative teachers in this school, and you pretty much were able to do what you needed to do and use your creativity and kind of go with your own flow more or less.”

(Kosten Teacher)
Asking the Difficult Questions about Organizational Routines

- What is the theory of action behind the routine?
- What arguments explain and evaluate the routine?
  - Why should it work?
  - Why might it not work?
- What are the advantages of this routine?
- What are the disadvantages of this routine?
- How is the routine connecting with/anchored in teaching and learning?
District Infrastructure Design for Teacher Leadership

- Infrastructure for mathematics instruction
  - New Inquiry-Based Elementary School Mathematics Curriculum
  - Resource and material adoption (investigations)
  - State standards alignment
  - Unit assessment development
- Infrastructure (re)design for teacher leadership
  - District-wide and school specific organizational routines (e.g., arrays, toolbox, PLCs).
  - Math coaches in some schools
  - Professional development in math for select teacher leaders
Teacher Leadership and Training as a Marker of Expertise

Karen (1st grade)

“Because he’s a second grade teacher….He’s kind of become the math person to see because he’s taken this extra training that nobody else in the building has done, and I know that he’s interested in math so, he’s just one that I’ve gone to that I know focuses very heavily on, I like his beliefs and the way that he has his room set up and the way that he carries himself.”
Professional Development & Teacher Leaders for Mathematics (John)
“[Emily] really wasn’t our facilitator [last year], though she was my co-worker, just a third grade teacher. I knew she had a wealth of knowledge, I just wasn’t in [her classroom] when she was teaching math. But, now that she’s moved into this math facilitator position, that’s different…She’s been trained in it. And, she’s gone to school for it and she’s a great coach. She knows a lot about math and I trust her that she has a lot of, a wealth of knowledge… She’s the go-to person.”

Angie, Special Education
Math Coach Transforms Interactions about Mathematics Teaching (Bryant Elementary)
Infrastructure Redesign Promoted Advice and Information Seeking in Mathematics

Average In-Degree for Teacher Leaders and Other Teachers, Auburn Park School District

<table>
<thead>
<tr>
<th></th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
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</thead>
<tbody>
<tr>
<td>Toolbox Members (6)</td>
<td>1.60</td>
<td>2.80</td>
<td>2.67</td>
</tr>
<tr>
<td>Fundamental Math</td>
<td>4.33</td>
<td>6.00*</td>
<td>6.00</td>
</tr>
<tr>
<td>Participants (9)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math Coaches (3)</td>
<td>6.33</td>
<td>16.33**</td>
<td>18.00</td>
</tr>
<tr>
<td>Other Teachers (256)</td>
<td>1.54</td>
<td>1.60</td>
<td>1.36</td>
</tr>
</tbody>
</table>
Infrastructure Redesign Promoted Brokering in Mathematics

Average Betweenness for Teacher Leaders and Other Teachers, Auburn Park School District

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</thead>
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<tr>
<td>Toolbox Members (6)</td>
<td>5.00</td>
<td>75.80*</td>
<td>48.86</td>
</tr>
<tr>
<td>Fundamental Math</td>
<td>32.44</td>
<td>144.33*</td>
<td>115.42</td>
</tr>
<tr>
<td>Participants (9)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math Coaches (3)</td>
<td>38.67</td>
<td>248.67**</td>
<td>222.97</td>
</tr>
<tr>
<td>Other Teachers (256)</td>
<td>10.85</td>
<td>24.81*</td>
<td>11.90</td>
</tr>
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</table>
### Teacher Leadership as a Coupling Mechanism

**Change in Teachers’ Beliefs about and Reported Practices in Mathematics**

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<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
</tr>
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<tr>
<td><strong>Beliefs about Mathematics Instruction</strong></td>
<td>3.35 (0.5)</td>
<td>3.46*** (0.5)</td>
<td>3.51*** (0.5)</td>
</tr>
<tr>
<td><strong>Mean (SD)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reasoning and Problem-Solving Practices</strong></td>
<td>2.39 (0.4)</td>
<td>2.52*** (0.4)</td>
<td>2.64*** (0.5)</td>
</tr>
<tr>
<td><strong>Mean (SD)</strong></td>
<td></td>
<td></td>
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</table>

*Notes:* Means are based on teachers from 12 schools with over 70% response rates who responded in every year of the survey. Significant differences are for comparisons to 2009-10. ***p<.001; **p<.01, *p<.05; +p<.10
Organizational routines Social Interactions & Structure

- ‘Socio-technical system’ ... inter mental models (Hutchins, 1995) in material and abstract tools

- Organizational routines and tools embody representations of what it means to learn, teach, and improve teaching.

- Organizational routines embody norms about the practice of improvement.

- Organizational routines have both affordances and constraints enabling some sorts of interactions about somethings, constraining other sorts of interactions about other things.

- Organizational routines more or less embody macro institutional logics and these logics frame and focus micro interactions among school staff and stakeholders.
Entailments for R&D on Instructional Improvement Practice

- A *real time* and an *historical time* understanding of practice

- Attention to social (infra) structure in research and development work on the practice of instructional improvement

- Multi-level analytical approaches that attend to micro, meso, & macro levels simultaneously

- Adopting a developmental approach and focusing on both change and maintenance efforts

- Embracing the bidirectionally of relations among the macro, meso, and micro
Conclusion: Moving Forward

• Putting diagnostic and design work central in leadership for learning.

• Diagnosis and design necessitates some sort of framework – one possibility is a distributed framework.

• A distributed framework focuses attention on the practice of leading (and managing) – interactions and infrastructure are essential elements.

• We must engage with the implications of anchoring our diagnosis and design work in the core work of human development organizations.
Tentative Summary

• The formal structure of education systems and school organizations influences work practice.

• The redesign of formal structure can contribute to changes in teachers’ work practice; that is, their advice and information seeking behavior.

• Teachers’ advice and information seeking behavior in turn is associated with changes in their beliefs about teaching and their reported teaching practices.

• The school subject matter is a key explanatory variable in understanding relations between system and organizational infrastructure and work practice.
More At:

- [http://www.distributedleadership.org](http://www.distributedleadership.org)

- [http://distributedleadership.org/DLS/Presentations.html](http://distributedleadership.org/DLS/Presentations.html)
What Matters?

- Setting Direction
- Human Development
- Organizational Development
Task Two

- Watch the brief video clip.
- How many times does the white team touch the ball?
The Challenge in Taking a Distributed Perspective: ‘Jack of All Trades’

“Jack of all trades and master of none I would say. It’s a little bit of every profession rolled up in one. It’s being a CEO of a company but having to do everything in that company from janitorial all the way to dealing with the CEO of Chicago Public Schools … We’re mom, we’re a teacher, we’re a guidance counselor, we’re a friend, we’re a mentor, a coach.” — Emily

“Your hands are in all the cookie jars. So like you need to know a little bit about everything and a lot about everything to some degree … you need to be able to juggle the big balls of running a school. And be ok with the dropping a little ball once in awhile.” — Nancy
The Challenge in Taking a Distributed Perspective: ‘Jack of All Trades’

“I’m responsible for the whole building of students and I’m ultimately—for most purposes—the end all, be all accountability person. Everything falls on me … no matter what …. One thing that really was smacking me in the gut Sunday night was the responsibility part. It’s like the ultimate responsibility …”

“the buck stops at your desk. … everything stops at my desk so I’m ultimately accountable for everything in this building. … Everything is your responsibility.”

“Captain of a ship … things sometimes are smooth sailing and then in a moment, the winds can turn, and you’re not sure you’re gonna stay afloat … I’m the last one out.”