Overview

• Getting beyond an ‘implementation mindset’ to engage in *Diagnosis* and *Design* from a *Distributed* Perspective: Leadership in 3-D.

• Anchoring Diagnosis and Design work in *Teaching* - an essential rather incidental consideration in leadership.

• Attending to the System and Organizational *Infrastructure* in our diagnosis and design work.
Diagnosis and Design from A Distributed Perspective: Leadership in 3-D
“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
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
Embracing the Realities

“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.”

Dr. Johnson

“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
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
Beyond Popular Framings of Practice

• Getting to practice – the *how* of instructional improvement.

• Some common assumptions (implicit and explicit) in framing practice:
  • Practice = individual behavior or action
  • Practice resides solely in the here and now interactions
  • Practice is distinct from social structure causing people to …
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
Anchoring Diagnosis and Design Work in Teaching & Learning
The Work of Human Improvement

• Uncertain or contested ends and means

• Mutual dependency

• Unpredictability of practitioner-client interactions
The Work of Human Improvement

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

• Uncertain or contested ends and means

• Mutual dependency

• Unpredictability of practitioner-client interactions
The Work of Human Improvement

- Uncertain or contested ends and means
- Mutual dependency
- Unpredictability of practitioner-client interactions
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 Practice
Teaching and Leadership

Teacher

Materials

Teaching Practice

Students

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: Attending to System and Organizational Infrastructure
The Practice Aspect

Leaders

Leadership Practice is in the interaction

Situation

Followers
Infrastructure

Separated System
Organizational Routines

- Organizational Routines are “repetitive, recognizable patterns of interdependent actions carried out by multiple actors.” (Feldman & Pentland, 2003)
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</td>
<td>-Standardized Tests</td>
</tr>
<tr>
<td></td>
<td>-Teacher Accountability</td>
<td>-Standards</td>
</tr>
<tr>
<td></td>
<td>-Monitor Instruction</td>
<td>-Student Assessments</td>
</tr>
<tr>
<td></td>
<td>-Teacher Development</td>
<td></td>
</tr>
<tr>
<td><strong>Breakfast Club</strong></td>
<td>-Teacher Development</td>
<td>-Research Articles</td>
</tr>
<tr>
<td></td>
<td>-Build Professional Community</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>School Improvement Planning (SIP)</strong></td>
<td>-Identify Instructional Priorities &amp; Resources</td>
<td>-Previous Year SIP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-District Guidelines</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Test Score Data</td>
</tr>
<tr>
<td><strong>Classroom Observations</strong></td>
<td>-Teacher Development</td>
<td>-School Protocol,</td>
</tr>
<tr>
<td></td>
<td>-Monitor Instruction</td>
<td>-District Protocol</td>
</tr>
<tr>
<td></td>
<td>-Accountability</td>
<td></td>
</tr>
<tr>
<td><strong>Real Men Read</strong></td>
<td>-Student Motivation and Support</td>
<td>-Books</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
“You close your door. You do what you want. You don’t know what everybody else is doing and it’s fine. Nobody is interested. Nobody’s checking on you or even interested in what you are doing . . . but it changed since then. We work much closer together ... First of all, we probably were forced to do some exchange of ideas in—when it first started. Then people found it’s very helpful and nobody keeping anything as a secret so we share freely. And it helps. (Teacher Interview)
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?
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

Improving Mathematics Teaching & Learning: The Case of Auburn Park

- Redesigning system and school infrastructure:
  - New mathematics curriculum
  - Investing in professional development of teacher leaders for mathematics
    - math content knowledge
    - math pedagogical content knowledge
    - leadership
    - child development
  - Strategic selection of teacher leaders
  - Creation of math coach position in 3 schools
  - PLC/grade level organizational routines
  - System level routines - tool box & arrays
Math Teacher Leaders and Interactions about Mathematics Teaching & Learning
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.”
Math Coach and Interactions about Mathematics Teaching
“[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
## 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>
</tr>
</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></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participants (9)</td>
<td>4.33</td>
<td>6.00*</td>
<td>6.00</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

<table>
<thead>
<tr>
<th>Category</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toolbox Members (6)</td>
<td>5.00</td>
<td>75.80*</td>
<td>48.86</td>
</tr>
<tr>
<td>Fundamental Math Participants (9)</td>
<td>32.44</td>
<td>144.33*</td>
<td>115.42</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>
</tbody>
</table>
• MAYBE add some quotations on how formal position and routines worked together …
# Teacher Leadership as a Coupling Mechanism

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

<table>
<thead>
<tr>
<th></th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
</tr>
</thead>
<tbody>
<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>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>
</tbody>
</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*
Conclusion: Moving Forward

- Putting diagnostic and design work central in research and development work on leading and managing.

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

- A distributed framework focuses attention on the practice of leading – interactions & infrastructure are central concerns.

- We must engage with the implications of anchoring our diagnosis and design work in teaching and learning.
More At:

- http://www.distributedleadership.org
- http://distributedleadership.org/DLS/Presentations.html