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Curriculum Specialization

 Grades 4 and 5 classroom teachers specialize in either math and science (referred to as *inquiry*) or integrated language arts and social studies (referred to as *humanities*)

Intended Outcomes

Increase curriculum focus for teachers

 Increase depth of teacher knowledge in core subject areas (i.e., math, science, integrated language arts, social studies)

 Increase student learning in core subject areas given greater capacity of the teachers

Design

- Four elementary schools; grades 4 and 5
 - 37 grade 4 and 5 teachers
 - 929 grade 4 and 5 students
 - 1 coach
 - Site and district office administrators
- Grade level teacher dyads (or triads)
 - Humanities teacher: ILA and Social Studies
 - Inquiry teacher: Math and Science
- Two 135 minute instructional blocks daily
 - One block for Humanities; one for Inquiry
- Professional Development
 - Site level collaboration (dyad/triad; humanities/inquiry)
 - Across school collaboration and formal training
 - Coach (management/coordination; coaching)

Curriculum Specialization Project Theory of Change

Eisenhower Grades 4 and 5

- -2 Inquiry teachers
- -2 Humanities teachers
- -2 Dvads
- -159 Students

Morris Bye Grades 4 and 5

- -4 Inquiry teachers-4 Humanities teachers
- -4 Dyads -196 Students

Oxbow Creek Grades 4 and 5

-10 Inquiry teachers -9 Humanities teachers -10 Dyads

-433 Students

- Washington Grades 4 and 5
- -3 Inquiry teachers -3 Humanities teachers 03 Triads -141 Students

Grade 4 Dyad (Triad) Specialization

- Share 60 (90) students
- Two 135 min blocks:
 1 Inquiry (math / science with research process integrated);
- 1 Humanities block (ILA / social studies with reading and writing integrated)

Grade 5 Dyad (Triad) Specialization

- Share 60 (90) students
- Two 135 min blocks:
 1 Inquiry (math / science with research process integrated);
- 1 Humanities block (ILA / social studies with reading and writing integrated)

Specialists Integration

-Participate in integrated curriculum design -Use alternative mediums to reinforce

themes



Professional Development

For Teachers

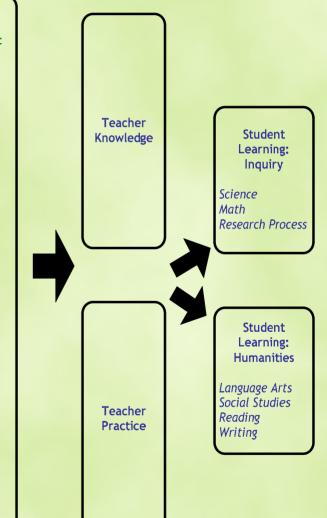
- Formal training sessions (math, CGI training 5 days)
- Coaching
- Dyad (triad) collaboration at school site
- Specialization area collaboration at school site
- -Specialization area collaboration across sites -Specialization and specialist collaboration at school site

For Coach

-Meet with other district coaches-Meet with supervisor

For Principals

-Monthly meetings with Associate Superintendent, Director of Elementary Curriculum and Coach



1/10/2003 Triads

First Year Findings

Evaluation by Jennifer York-Barr and Jean King Department of Educational Policy and Administration University of Minnesota

- A demonstrable change in student achievement as evidenced by MAP data would not be anticipated during the first year given the learning involved for teachers; most robust implementation and, therefore, discernable effects in student test scores would be expected during the second year.
- Available first year data is perceptual; feedback was primarily positive; several areas were identified to continue to address

Connection to Research:

Individual Change

Change consists of unlearning and learning, but far too many change agents gloss over or totally ignore the turmoil that unlearning unleashes.

Seymour Sarason, 1995

Concerns Based Adoption Model: Stages of Concern (Hall & Hord, 2005)

Stages of Concern Expressions of Concern

IMPACT

6 Refocusing I have some ideas about something that would work even better.

5 Collaboration I am concerned about relating what I am doing with what my co-workers are

doing.

4 Consequence How is my use affecting clients?

TASK

3 Management I seem to be spending all of my time getting materials ready.

SELF

2 Personal How will using it affect me?

1 Informational I would like to know more about it.

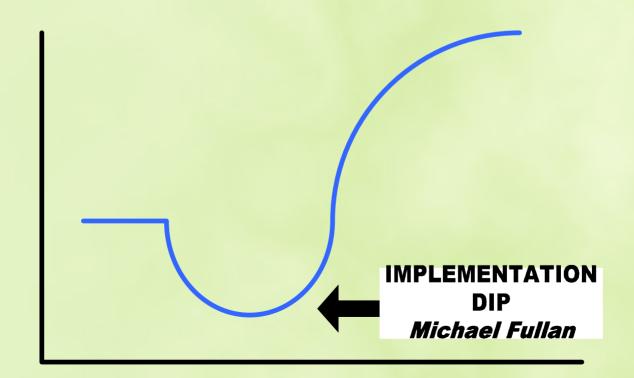
0 Awareness I am not concerned with it.

1/10/2007

Connection to Research:

Stages of Implementation

To restructure is to reculture, a lesson increasingly echoed in attempts at reform. Changing formal structures is not the same as changing norms, habits, skills, and beliefs. Michael Fullan, 1993



Research

"Students who learn content for understanding, are better able to connect ideas across lessons and other subjects...they are better able to transform the information or meaningfully apply it to problems or situations that require synthesizing what has been learned."

Linda Darling-Hammond, <u>The Right to Learn: A</u>
Blueprint for Creating Schools That Work

Why Specialization?

We know that...

- The nature of elementary education has changed, increased content expertise and varieties of teaching strategies require more in depth knowledge
- There is need to redistribute curriculum responsibilities and realign resources
- The change to a new system will require an initial investment to support the new structures and practices for success

Today's Situation

- There are those who describe
 America's schools as failing, however we are doing a better job than we ever have.
- The midwest has good schools. Often being good is the greatest barrier to being great.

Good to Great

"We don't have great schools, principally because we have good schools. We don't have great government, principally because we have good government. Few people attain great lives, in large part because it is just so easy to settle for a good life. The vast majority of companies never become great precisely because the vast majority become quite good - and that is their main problem"

Jim Collins, Good to Great, 2001

"Great organizations keep clear the difference between their core values (which never change) and operating strategies and cultural practices (which endlessly adapt to a changing world)."

Jim Collins, Good to Great & The Social Sectors, 2005

Teachers

- It is critical that teachers are comfortable with the respective disciplines they teach
- Most current elementary teachers have had one course in college that was an overview of mathematics education and one methods course
- Nationally, 4% of elementary teachers have the equivalent of a minor in math
- Teacher collaboration and professional discussions need to be structured and supported

Purpose of Specialization

- Increase student learning and achievement through increased instructional focus for teachers
- Increase flexible grouping within the heterogeneous classroom to address background/prior knowledge and learning gaps
- Increase learning time for students in the areas of science, social studies and inquiry

Why this model?

- Allows teachers to become more expert in the disciplines they teach
- Facilitates the differentiation of instruction because there is less material and more content focused responsibility
- Provides blocks of time which teachers can use flexibly to meet the needs of students
- Facilitates the development of a professional learning community

Professional Development

- Providing mathematical instruction at a deep level requires long term sustained staff development and professional support
- Workshops in the content areas and for curricular adoptions
- Summer curriculum development opportunities
- On-site visits encouraged
- Facilitate group inquiry activities for groups of teachers
- Support by coaches

Alignment with Research

- High quality professional development
 - → Focus on curriculum and instruction (content)
 - → Ongoing and job-embedded
 (ongoing reflection → learning → changes in practice)
 - → Collaboration for collective learning and efficacy

School change

- → It's all about LEARNING and the "real change" is at the level of implementation (classroom, team levels)
- → CBAM: informational → self → task/management impact
- → School support, leadership
- → Personal/individual change
- → Organizational/collective change

Learning Communities...

 In less advantaged Chicago Public Schools, "those with strong professional learning communities were four times more likely to be improving academically than schools with weaker professional communities."

Anne C. Lewis Phi Delta Kappan, March 2002

An Emergent Theory of Instructional Improvement through Specialization

TEACHERS

Focus (just 2 areas)

More in-depth knowledge

Collaboration increases teacher learning

LESSON PLANS

More creatively and thoroughly designed and prepared

More engaging lessons

More overall coherence

INSTRUCTION

More intentionally and confidently delivered

More adept engagement and adaptation / flexibility

STUDENTS

More focused and engaged

Learn more

More enjoyment and enthusiasm



Findings

Teacher knowledge and practice

Professional development

Student learning

Overall teacher work experience

Summary of Findings by Question Q1: Teacher Knowledge and Practice

- Narrowed subject area focus resulted in:
 - → Increased subject area knowledge and confidence
 - → More in-depth planning
 - → Higher quality instruction
- Teachers more confident with the curriculum
- Value of teaching a lesson multiple times
- Helpful to have more than one adult working with students and parents
- Teacher Quote: "I taught more cohesively, in more depth, with more connections between subject and skill areas."

Summary of Findings by Question Q2: Professional Development

- Teacher collaboration within each site most valued (dyad/triad and specialization)
 - Collaboration as support for learning about subject area and improving instruction
 - Collaboration as support for thinking about individual students
- Teaching lessons more than once
- Some value in specialization collaboration across sites
- Teacher Quote: "This grade level collaboration is the most useful professional development for me. These other teachers really help me think about and refine my skills and lessons."

Summary of Findings by Question Q3: Perceived Student Engagement and Learning

- More and deeper student engagement
 - More intentionally designed and in-depth lessons
 - Possible positive affect of class and teacher changes
- More student enthusiasm
- More curricular and instructional coherence
- Perceived higher levels student learning than in previous years
- Teacher Quote: "They are getting deeper and developing into sturdier, stronger students."

Summary of Findings by Question Q4: Overall teacher work experience

- Overall, decidedly positive
 - Nearly all teachers ended year with enthusiasm
 - → Energized and supported by the collaboration
 - Workload not lessened, but more meaning and coherence
- Some challenges remain
 - → Scheduling
 - → Collaboration (interdependence)
 - → Increased numbers of students and parents
 - → Implementation issues
- Teacher Quotes: "At the beginning of the year, everybody was skeptical...at the end of the year, everybody involved was on board." ... "I am more effective as a teacher, my kids are enjoying school more because I can create better lessons, and my kids will test higher."

Closing Perspective

"The majority [of elementary teachers] have prided themselves on being quality generalists. This program asked for a big shift from them. If we do enlarge, we need to be aware of the change that we are asking these teachers to make from their generalist heritage."

Building the Bridge as You Walk on It



Source: Quinn, R.E. (1996). Deep Change: Discovering the Leader Within. San Francisco: Jossey-Bass.

