The Loras College Lesson Study Project

Dan Willis
Loras College
daniel.willis@loras.edu

http://myweb.loras.edu/lessonstudy

Joint Math Meetings
San Antonio
January 12, 2006
TIMSS

Achievement
Curriculum
Instruction
Professional Development
Lesson Study

School based
Collaborative
Sustained over time
Focus on learning
Data driven
Action research

Japan, China, ...
Lesson Study Cycle

1. Set goals
2. Look at curriculum & materials
3. Plan a research lesson
4. Teach the research lesson
5. Discuss the research lesson
6. Revise & reteach the lesson
7. Summarize what was learned
Lesson Study in the United States

Sites:

Paterson, NJ
Belleview, WA
Chicago, IL
and many others!

Experts:

Akihiko Takahashi (DePaul)
Makoto Yoshida (GER)
Catherine Lewis (Mills)
Clea Fernandez (Columbia)
Patsy Wang-Iverson (RBS)
Loras College
Lesson Study Project

Focus: K-6 Mathematics

Current funding: Iowa Title II grant
($150,000 / year for 3 years)

Matching funding: Loras College,
AEAs, and school districts

Year 1: Number & Operations
Year 2: Geometry & Measurement
Year 3: Probability, Statistics, Algebra
Loras College
Lesson Study Project

49 total participating teachers:

1/2 in Dubuque;
1/2 within 80 miles

16 lesson study teams

2-4 (usually 3) teachers on a team;
usually near the same grade

15 buildings:

2 Title I schools
5 parochial schools

10 school districts in Eastern Iowa
Loras College
Lesson Study Project

Co-directors:

Dan Willis, Ph.D. (Math)
Chris Nugent, M.S. (Elem Ed)

Other leaders:

Math faculty
AEA Math consultants

Consultants:

Akihiko Takahashi, Ph.D.
Makoto Yoshida, Ph.D.

Assessment:

Linda Munger, Ph.D.
Loras College
Lesson Study Project

Two four-day summer workshops:

June:

NCTM
TIMSS
Math content
Lesson study

August:

Lesson study
Problem-based instruction
Loras College Lesson Study Project

Follow-up “full group” meetings:

By region
3 Fall & 3 Spring
Guest presenters (ICN)
Sharing ideas and problem-solving

School Year work:

2+ lesson study cycles
Public research lessons
Write reports
Loras College
Lesson Study Project

Incentives for participating teachers:

3 Education credits ($125/credit)
3 Math content credits ($125/credit)
$1500 annual stipend per teacher
$300 for travel or materials

and less tangible benefits!
Loras College
Lesson Study Project

Dissemination

Public research lessons

Dubuque, Chicago, …

Talks

San Antonio, St. Louis,

Chicago, various places in Iowa

Web Site:

http://myweb.loras.edu/lessonstudy
Every Student Counts
(Iowa Math Initiative)

Teaching for understanding
Problem-based instructional tasks
Distributed practice
Problem-Based Instruction

Introduction
Launch
Explore
Discussion ("Lifting")
Extensions
NSDC Standards for Professional Development

Improves Learning
Learning Communities
Data driven
Carefully designed
Collaboration
Quality Teaching
Assessment

Qualitative & quantitative
ITBS (Iowa Test of Basic Skills)
Problem solving probes
Behavior rating scales
LMT (Deb Ball et al)
Meeting minutes
SEC (Survey of Enacted Curriculum)
End of Year
Feedback from Teachers

“collaboration … was great”
“great learning experience”
“summer session was very valuable”
“work with Dr. T. was amazing”
“I have learned so much”
“extra time & effort but well worth it”
“this was so eye-opening”
“it has been a great experience!”
“it has been wonderful!”
“well worth the effort it took”
Funding Opportunities

Title IIA
Title IIB (MSP)
NSF (MSP)
NEA

Local Resources