



NJ Center for Teaching and Learning

www.njctl.org

The Progressive Mathematics Initiative:
Getting Great Results AND Making Life
Easier

NJCTL - Mission



...to empower teachers to be leaders in the transformation of public schools so that all students have access to a high quality education.

NJCTL - Programs



Goals

- to improve student achievement in science and math
- to increase the number of skilled science and math teachers
- to build capacity for teacher leadership
- to provide opportunities for purposeful collaboration (PLC)

NJCTL Presenters



- **Heather Crosson**, Mathematics Teacher, Spragg Elementary Teacher, Egg Harbor, NJ
- **John Getz**, Mathematics Fellow; Teacher, Vernon Township H.S., NJ; Nationally Board Certified Teacher

The Progressive Mathematics Initiative: Getting Great Results AND Making Life Easier



- to introduce PMI
- to explore a PMI unit: what's available now and what we're working on
- to discuss the advantages of PMI

Demo Lesson



Goals of PMI:



- To address student achievement gaps in mathematics
- To incorporate Algebra I in the middle school curriculum so that all students demonstrate proficiency in Algebra I by the end of eighth grade.
- To have a comprehensive mathematics course of study that is vertically aligned from K-12 and aligned to the Common Core.

The Progressive Math Initiative (PMI)

Consists of math educators who:

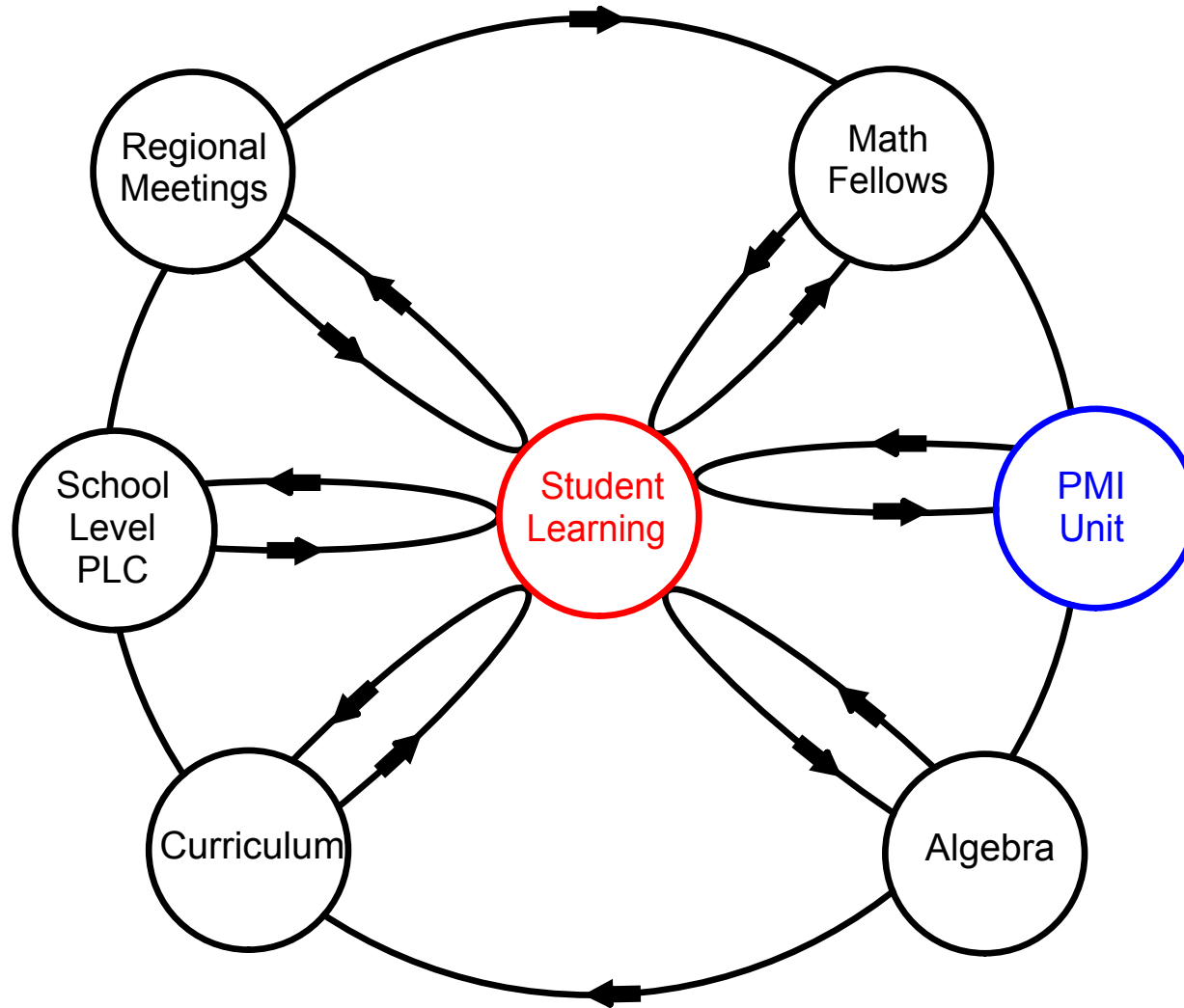
- Believe that teacher collaboration can lead to higher levels of student achievement
- Have formed PLCs to create, edit, and revise math units

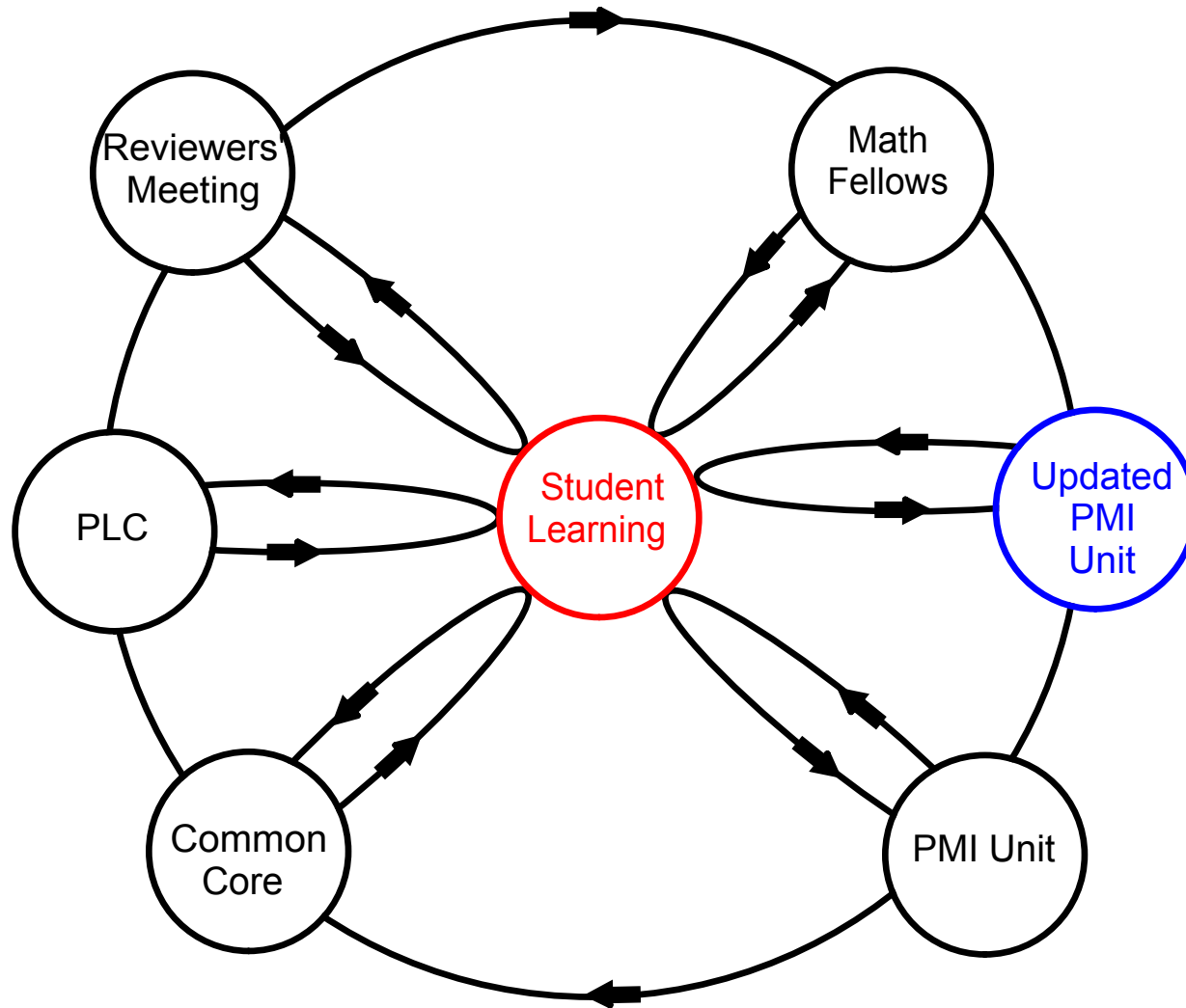



The process of creating, editing, and revising units encourages collaboration among PLC members:

- curriculum organization
- instructional strategies
- sharing of best practices
- formative/summative assessment













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- Professional Development
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News

NCTM 10-20-2011 Presentation Information

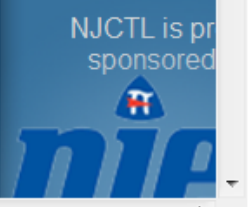
Melissa Axelsson and Heather Trapani presented at the NCTM conference on Thursday, 10-20-11. Read on to get the PowerPoint.
[Continue reading →](#)

Teachers Drive CTL Math Program Development

Courses

What is PSI / PMI?

[View Course](#)



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Math

Home > Courses > Math

The courses below were designed by teachers as part of the [Progressive Mathematics Initiative \(PMI\)](#) which uses innovative approaches to pedagogy, assessment strategies, curriculum, and technology integration. These approaches have led to improving student achievement. Professional development opportunities are available to enable teachers to derive the maximum benefit from these course materials.

Learn more about [PMI](#) and our other programs on our [Programs](#) page or view [upcoming professional development](#) opportunities.

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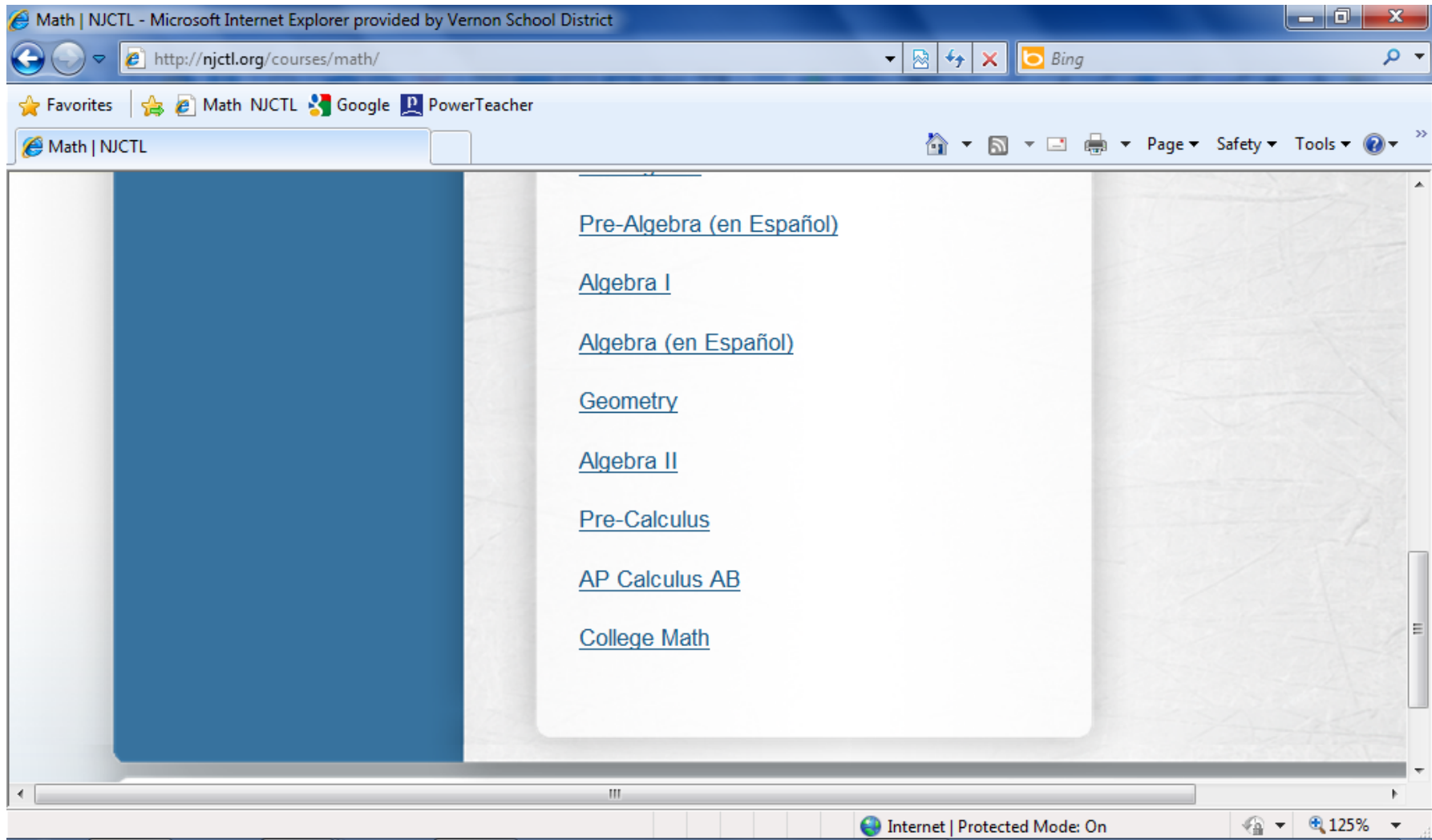
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- [7th Grade Math](#)
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Algebra I

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Handouts

-  [Table of Contents for All Units](#)

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Algebra I | NJCTL

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- [Statistical Analysis & Data Displays](#)
- [Rational Expressions & Equations \(Alg 1\)](#)
- [Open-Ended Application Problems \(Supplemental\)](#)

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Traditional Teaching
versus
SMART Teaching

In a classroom with a traditional set-up,
how do you teach solving equations?

Sample

Now let's look at how we teach solving equations in a SMART classroom.

[Link to Solving Equations Unit](#)

Benefits of PMI



Students

Teachers

Getting Great
Results AND
Making Life Easier

Administrators

Parents

Students

Teachers

Benefit to Students:

- Reduces anxiety related to asking questions
- Increases student participation
- Engages students in the learning process
- Provides consistency of experience

Administrators

Parents

1 Recall your own educational experiences:

A I was always engaged in the lesson.

B I was rarely engaged in the lesson.

C It depended on the teacher, whether I would get involved with the lesson.

D The subject matter determined whether I would get involved.

Students

Teachers

Benefits to Parents:

- Provides the opportunity for absent students to stay current
- Assesses all children's success with the curriculum daily
- Establishes uniformity across classrooms
- Reduces confusion and concern over prior knowledge

Administrators

Parents

2 In your time as an educator, which concerns have you heard from parents? (choose all that apply)

A How come Mr. "So and So" doesn't teach that?

B You expect that my child knows these things and I'm saying they never covered it!

C That teacher just lectures; they don't realize that no one is getting it.



Students



Teachers

Benefits to Teachers:

- Embeds PD related to content and technology regularly
- Ends isolation among teachers
- Encourages the teacher to be a facilitator of the learning process
- Identifies student misunderstanding quickly and easily
- Enhances the ability to analyze and share student work



Administrators



Parents

3 On a scale of 1 to 5, with 5 being the most valuable, how would you rate the value of having a consistent curriculum design?



Students



Teachers

Benefits to Administrators:

- Teaching of content is transparent
- Provides many opportunities for ongoing in-house PD
- Creates a system of learning - a consistent curriculum design
- Provides new teachers with the same instructional materials used by veteran teachers



Administrators



Parents

4 Think back to your first year as a teacher. How did your first year lessons compare with your fifth year lessons?

A First Year Better than Fifth Year

B Same

C First Year Lacking to Fifth Year

D Can't remember

5 Can you see the value of a program that allows the incorporation of everyone's Best Practices?

Yes

No



Students



Teachers

All stakeholders benefit from the collaborative spirit in which the SMART lessons are designed and the unique lesson presentations that result in curriculum delivered with consistency.



Administrators



Parents



The impact of PMI is directly proportional to the collaborative efforts of knowledgeable, mathematical minds.

PMI is
improving education
and
the educational experience
for all.

