Implementing Progress Monitoring

Pennsylvania's Statewide Approach
Session Goal

- Provide an overview of Pennsylvania’s statewide progress monitoring initiative including:
  - The Approach
    - Background and Getting Started: The Pilot
    - The Design
      - General Outcomes and Specific Skills
  - The Training Plan
  - Outcomes
  - Challenges and Lessons Learned
PA: Who We Are!

- Pennsylvania Department of Education
- Bureau of Special Education
- PATTAN
  - East, Central and West
- Intermediate Units
- School Districts
Monitoring Student Progress: A Quick Detour

Assessing Prior Knowledge
What is Progress Monitoring?

*Progress Monitoring is the ongoing process which involves:*

- Collecting and analyzing data to determine student progress toward specific skills or general outcomes.

- Making instructional decisions based on the review and analysis of student data.
Progress Monitoring Cycle

**Initial Assessment:**
- Direct Intervention
- Historical Data
- Standardized Assessments
- Diagnostic Assessment
- Curriculum-Based Assessment
- Parent Input

**Ongoing Evaluation:**
- Evaluate Effectiveness of Instruction by Monitoring Progress
- Record and Use Data to Assess Progress & Make Decisions
- Adjust Goals & Objectives
- Adjust SDI & Instruction As Needed
- Report to Parents

**Design Instruction:**
- Develop Goals & Objectives
- Identify SDI
- Alignment to General Curriculum
- Instructional Grouping & Scheduling
- Identify Progress Monitoring

**Deliver Instruction:**
- Deliver Instruction According to Goals & Objectives Using SDI
- Collect Data on Progress
- Monitor Student Response & Feedback
- Adjust Goals & Objectives
- Adjust SDI & Instruction As Needed
- Report to Parents
The Goals of Progress Monitoring

- Provide data to assist in making decisions about students
  - To guide instructional decisions

- Provide data on student performance
  - To determine current level of learning/behavior/performance
  - To measure and report progress toward goals

- Provide data for the reevaluation process
  - To determine if the student still meets eligibility for special education AND still needs specially-designed instruction
Benefits of Progress Monitoring

- Parents and students know what is expected

- Teachers have organized record of students’ performance

- Teachers know what is working or not working with their instruction based on data

- “Easy to Understand” way to show parents the progress

- IEP teams have comprehensive data on student performance for decision making
Essential Elements of Progress Monitoring

- Measurable goals/outcomes
- Efficient and effective for use in the classroom
- Sensitive to increments of student growth
- Usable format
- Data driven
- Connected with general ed. curriculum/appropriate activities
Progress Monitoring in Pennsylvania

A Two-Prong Approach
A Two-Prong Approach

General Outcomes

- Appropriate for all students, including learning support and at-risk students, working in the general education curriculum (reading and math)

- The goals and objectives are based in the general education curriculum

Specific Skills

- Appropriate for all students with IEPs, particularly those with significant disabilities

- The goals and objectives are referenced to the general education curriculum
Assessment
(A balance between outcomes-based measurement and specific skills assessments)
They are *simple, accurate*, and reasonably *inexpensive* in terms of time and materials.

They are considered so *important* to doing business well that they are *routine*.

They are *collected* on an *ongoing and frequent basis*.

They shape/inform a variety of *important decisions*. 
Models of CBA: General Outcome Measurement

- Standardized, Reliable, & Valid
- Index growth in general curriculum over time and across a wide range of skills
- May or may not be measuring directly the curriculum of instruction
- Do suggest when instructional modifications are needed
- Do not specifically suggest instructional modification
PA’s Seven Step Process to Progress Monitoring

Monitoring: General Outcomes and Specific Skills

1. Measurable Annual Goals and Objectives
2. Data Collection Decisions
3. Data Collection Tools & Schedule
4. Representing the Data
5. Evaluation of Data
6. Instructional Adjustments
7. Communicating Progress
History of PM in Pennsylvania

- The Pilots
  - Original mini-pilot in spring, 2002
  - Statewide pilot, 2002 - 2003

- Level I: Statewide Training and Implementation in 2003 - 2004

- Level II Statewide Training and Data Collection in 2004 – 2005

- Two year follow-Up of original 14 districts in statewide pilot in spring 2005

- Special Projects
  - Reading Fluency (Hagar)
  - Algebra (Foegan)
  - Writing (Edwards-Santoro)
  - Specific Skills (Shapiro)
Statewide Pilot 2002-2003:
Lessons from the Field
Purpose of Pilot

☐ Conduct a training project on the use of an outcomes based measurement approach to monitor student progress in reading and math

☐ Discuss the use of data-based decision-making
  ◦ How can the analysis of student data improve educational results?
  ◦ How can the analysis of student data suggest changes in instructional grouping, instructional strategies, motivation systems, etc.?
Participants and Target Areas

- 14 school districts and 71 teachers
- Special education teachers assigned to learning support or emotional support, grades 1 through 5
- Site coordinators in each district facilitated the implementation of the project
- PaTTAN consultants
- University consultants

- Each teacher monitored at least two students in oral reading fluency and math skills
- Selected measures were quick and easy to administer
Materials for Monitoring

**Reading**
- All teachers used the **passages** created and developed by the **AIMSweb** product.
- Passages were written and developed with **readability** specifically for the various **grade levels**.
- Students were **assessed** at levels indicated by teachers as providing reasonable challenge given current **instructional level**.

**Math**
- All teachers used the **Monitoring Basic Skills Progress (MBSP)**, basic math computation and application blackline masters.
- Students were assessed at levels indicated by teachers as providing reasonable challenge given current instructional level.
Frequency of Monitoring

- **Reading**: Monitored 2xweek, with at least one day between assessments

- **Math**: Monitored 1xweek, with computation monitored one week and applications the next
Training and Support

- We taught teachers to:
  - Collect data
  - Graph data
  - Display aim line or goal line
  - Display trend line or inspect visually
  - Use decision rules to inform instruction

- Training was provided via:
  - Large and small groups at regional PaTTAN facilities
  - On-site visits and individual feedback meetings
  - Whole group final follow-up session
PM Implementation

- Teachers implemented progress monitoring Nov. through May
- Teachers graphed both reading and math data
- School district site coordinators facilitated communication between participating teachers and PaTTAN consultants
- PaTTAN consultants served as facilitators between site coordinators and University consultants
Statewide Pilot Outcomes

- PM was feasible for most teachers
- Teachers learned to collect and analyze data
- Some instructional arrangements presented PM challenges (full inclusion models)
- Additional training was needed on using data for instructional decision making
- Teachers found innovative ways to use the data (feedback to parents, IEP incorporation)
Results of Pilot

- All skills showed changes in desired direction during the course of the pilot
- Substantial improvements in many skills
- Confidence in the data increased in all areas
- Strongest teacher confidence in oral reading fluency and computation data
- Perceived importance of progress monitoring stronger after the pilot
Table 1. Summary of Teacher Self-Reported

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<td>OVERALL - Importance of Progress Monitoring</td>
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Lessons Learned

- Data collection was deemed “doable” by teachers
- Kids enjoyed participating
- More kids wanted to be involved
- More Professional Development needed for teachers and OTHERS
- Consider structural aspects of special education
  - Instruction in inclusive settings
  - Time allocated for reading/math instruction
  - Juggling groups
Challenges

- Some computer problems
- Hand graphing
  - Difficulty extending aimline
  - Need to indicate interventions
- Time: How to fit in progress monitoring?
  - Better use of instructional assistants
  - Students do own graphing
Most Frequently Asked Question: How **LONG** does progress monitoring take?

“It’s not an issue of losing time because progress monitoring helps make my instructional time more effective. Monitoring student progress optimizes my teaching because it makes it better.”

Pilot Project Teacher
Level I: 2003-04

Statewide Training and Implementation
Project Decisions:

- Mirrored Pilot Parameters

- Data Collection Decisions: Targets
  - Oral Reading Fluency - 2wcpm/wk
  - Math Computation and Concepts/Application - 1 dcpm/wk.

- Data Tools and Schedules
  - 2x/wk reading, 1x/wk math.

- Data Representation
  - Graphed via hand or electronic tool

- Decision Rule - 4 of 6 data points
Roles and Responsibilities

☐ Teachers
☐ Site coordinators
☐ IU CSPD consultants
☐ PaTTAN consultants
☐ University consultants
Teachers

- Attend all scheduled trainings
- Participate in on-site team visitations led by IU CSPD and PaTTAN consultants
- Implement progress monitoring by:
  - Administering appropriate data collection tools
  - Collecting, graphing and analyzing data
  - Making instructional adjustments as appropriate
  - Communicating progress
Teachers: Data Collection Expectations

- Choose at least 2 special education students

- Using the IEP, select an approach to monitor these students’ progress toward general outcomes or specific skills
Teachers: Data Collection Expectations

- Establish a baseline for each student based on the present levels of educational progress or baseline assessments on the skill

- Based on a student’s expected rate of progress, establish an aim line (goal) for each student
Teachers: Data Collection Expectations

☐ Collect data on an ongoing basis according to the schedule you have established for progress monitoring

☐ Each teacher should have collected a MINIMUM of 6 data points on each student prior to the Day 3 training in Oct/Nov 2003

☐ Create a folder for each student whose progress you will be monitoring
Teacher Expectations

- Set annual goals and objectives
- Determine baseline
- Determine target
- Map aimline
- Monitor frequently using decision rule
- Implement and monitor instructional change when decision rule is broached
5th grader, baseline 60wcpm in 2\textsuperscript{nd} grade text, goal 100wcpm in 3\textsuperscript{rd} grade text
Site Coordinators

- Attend pre-training and all subsequent trainings with the district team
- Participate in on-site visits led by PaTTAN and IU CSPD consultants
- Act as a liaison between the district and team and PaTTAN/IU consultants
Site Coordinators

- Support team in implementing progress monitoring
- Facilitate professional development efforts in progress monitoring with other special education teachers in the district
- Meet with other administrators in to move progress monitoring forward in the district
IU CSPD/PaTTAN Consultants

- Attend all series trainings
- Lead on-site visitations with district teams
- Provide on-going on-site technical assistance and support as needed by district teams
- Review district team action plans
- Review data collected by districts
University Consultants

- Provide direction related to formal training content
- Provide technical assistance and support related to on-site visits
- Develop Frequently Asked Questions/Answers
- Develop a process for collecting student data
Level I: PM Training

- Training Focus
  - Progress Monitoring in Special Education

- Focus Areas
  - Key Principles of Progress Monitoring
  - District Action Planning
  - On-Site Visits
  - Progress Monitoring Updates to Staff
PM Outcomes: 2003 - 2004

- 2,690 special education students
- Approximately 300 districts, 29 IU’s trained
- LD = 1745; SED = 271; MR = 244
- 1967 = GOM; 211 = SS; 166 = Behavior; 346 = undetermined
- 1395 = reading; 489 = math computation
- 50.8% weekly collection; 31.8% 2x/week
- FOR LD: 728 Reading, 230 Math
Questions
Reading and Math Computation

☐ Average rate of gain across instructional grade levels?

☐ Average rate of gain across DIFFERENCES between enrolled and instructional grade levels?
# Comparison of PA PM to Fuchs Study in Reading-Instructional Level

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Comparison of PA PM to Fuchs Study in Math Computation-Instructional Level

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Grade Minus Instructional Level - Reading

Grade Level

Words Per Week

-1 1.76
1 1.28
2 1.14
3 1.02
4 0.8
5 1.22
6 1.09
7 1.09
8 0.36
9 1.85
Grade Minus Instructional Level - Math
Conclusions: 2003-2004

1. PM, especially GOM, reflect gains in student performance in reading and math computation

2. Teachers were able to conduct PM on student for entire year

3. PM should be widely adopted as method to reflect basic performance in reading and math

4. Established realistic goals for students with LD

5. Data collected 3 points in time can be used to reflect year long outcomes
2003-2004 Lessons Learned

1. Establish the data collection process at the start of the training year

2. Keep the data collection form simple

3. Focus data collection on GOM progress monitoring only

4. Enhance quality of training
Lessons Learned and Adjustments Made (cont.)

5. Frequency of collection can be reduced to weekly IF decision rules are also adjusted.

6. Teachers assessing fluency often do not view it as an outcome but as a skill.

7. Teachers are reluctant to increase instructional level when a student is doing well.

8. Savvy administrators use progress monitoring data to inform supervisory and programmatic decisions.
Level II: 2004-2005

Statewide PM Training and Implementation
Training Focus

- Using Data to Drive Instructional Interventions
- Content Area Intervention
  - Reading
  - Math
  - Behavior
- Low-Incidence Disabilities
Reading: Moving Beyond the Data

- Intervention s in Reading content Areas
  - Language Development
  - Fluency
  - Vocabulary
  - Comprehension

- Onsite guided practice
Math Training

Math: Progress Monitoring in Math

- Additional training in math content areas
  - Math Fluency
  - Calculation
  - Problem Solving

- Onsite Guided Practice
Behavior Training

- Antecedent and Consequence Strategies that Promote Individual and Group Behavior Change

- Making Data-Based Decisions – Analyzing the Efficacy of Interventions

- Prevention of Behavior Problems via Effective Classroom Management and Instruction
Low Incidence Disability Populations

- Effective instruction and research-based interventions for school-age students and early learners

- Onsite Guided Practice
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## Comparison of PA PM to Fuchs Study in Computation-Instructional Level

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Two Year Follow-up on Statewide Pilot
2005-2006
Pilot Follow-up

- 13 of 14 original pilot districts visited
- Personal interviews with
  - Administrators
  - Teachers (original)
  - Teachers (newly trained.
- Review of student data
  - Original students
  - Present students
Status of PM in Pilot Districts

- 5 of the 13 are using progress monitoring as designed
- 2 maintained it in modified form
- 2 districts report use by a few teachers
- 4 districts have no concerted progress monitoring program.
Lessons Learned

- Successful Implementation of Progress Monitoring Requires
  - Administrative mandate-’This is the way we do business here.’
  - Administrative Support-’However, we will provide all the training, support, time, and materials required for success.’
  - Time-Teachers require two years to realize the benefits and efficiency of progress monitoring
Pilot District Ongoing Needs:

- Additional training in the use of progress monitoring to guide instruction.

- Training in the use of progress monitoring in full-inclusion schools.

- Additional training in general outcome vs. specific skill monitoring. (Teachers continue to view ORF as a skill measure not a reading health measure.)
Progress Monitoring Efforts: 2004-2005

Intermediate Units
Progress Monitoring Expansion, 12/05

- **29 of 29** Intermediate Units Responded to a progress monitoring survey.

- These IUs serve **501 LEAs**

- **433 of PA’s 501 LEAs (86%)** have received Level I Progress Monitoring Training.
PM Expansion

- **201** of the **433 (46%)** trained LEAs provided turn-around training.

- **377** progress monitoring events were provided thus far in the 05-06 school year.

- **162** events are planned for the remainder of the year.
Training Format

- Trained as District Teams: 58%
- Trained as School Teams: 11%
- Trained as Individual Teachers: 31%
Implementation

- 11% Status not Reported
- 12% Trained LEAs have not Implemented (53)
- 46% Trained LEAs implementing in Individual Buildings or Classes (203)
- 31% Trained LEAs Implementing in all District Special Education Classes (1398)
Special PM Projects in PA

- **Reading Fluency**
  - Automated progress monitoring system to allow students to record reading passages for automatic scoring

- **Algebra**
  - Research effort to measure effectiveness of algebra probes

- **Writing**
  - Research effort to generate information on the connection of various pm formats and writing instruction

- **Specific Skills**
  - Analysis of data and use of data in PA’s Schools for the Blind to better define pm with low incidence populations
Final Comments

- Confidence in PM as a valuable tool for monitoring student progress in special education
- Evidence of accountability: Administrative commitment is vital
- Evidence of growth for students in special ed (LD in particular)*
- Replication and strengthening of research findings over years
- Direct implications of research-to-practice
Quotable Quotes

- ‘I had no idea how many instructional decisions I make every day, I need a nap.’

- ‘We want to participate in your data gathering effort. Progress monitoring has been very valuable to all our staff.’

- ‘It saves so much time. My IEPs are done!’

- ‘I know who is doing what and how well. (administrator on his staff)

- “Students love charting their progress and beating their scores!”