

Missouri Collaborative Work

CW = Improved Learning Outcomes for **ALL** Students



Focus of MO Collaborative Work

- Collaborative data teams
- Teaching/learning practices
- Common formative assessments
- Data-based decision making
- Implementation coaching

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Introduction

Through the Missouri State Personnel Development Grant (SPDG), a framework of high quality professional development has been developed. This framework includes the critical elements for the development of providing professional development content as well as supporting implementation with fidelity. The professional development content focuses on collaborative teaming, data-based decision-making, common formative assessment, and effective teaching and learning practices at the classroom level. The benefit has been a consistent approach to moving the statewide system of support toward improving the quality of professional development provided to schools showing a need to improve student achievement, in particular for students with disabilities.

Development of HQPD *Takes a Village* (aka *Statewide Coordinated Network*)

The Learning Package content was developed by 5 workgroups and 4 sub-workgroups. The workgroup members represented each of the 9 Regional Professional Development Centers (RPDC). The development of the Learning Packages was supported and finalized by the SPDG team at UMKC and vetted by the SPDG Management Team.

As we continue to learn from “what works” and “what doesn’t work” we will continue to revise and expand the framework and content.

Excellent depth. Very thorough support materials. Great use of expertise throughout the state. High level of content, processes, delivery. Great organization of training!

*-RPDC Consultant in reaction to the Roll-Out of the
Learning Packages (July 2013)*

About

State Personnel Development Grant | Collaborative Work

Collaborative Work desired outcome—

Improved outcomes for all Missouri students

Through **collaborative data teams**, teachers and administrators will assist one another to:

- ◆ implement effective **teaching/learning practices**,
- ◆ develop and administer **common formative assessments** that measure the effectiveness of instruction and student mastery of learning objectives, and;
- ◆ use **data-based decision-making** to guide team decisions about classroom learning and instruction.

2013-2014: 350 Collaborative Work Buildings

by the numbers

51 High Schools

44 Jr. High/Middle Schools

253 Elementary Schools

1 Early Childhood Center

1 Alternative

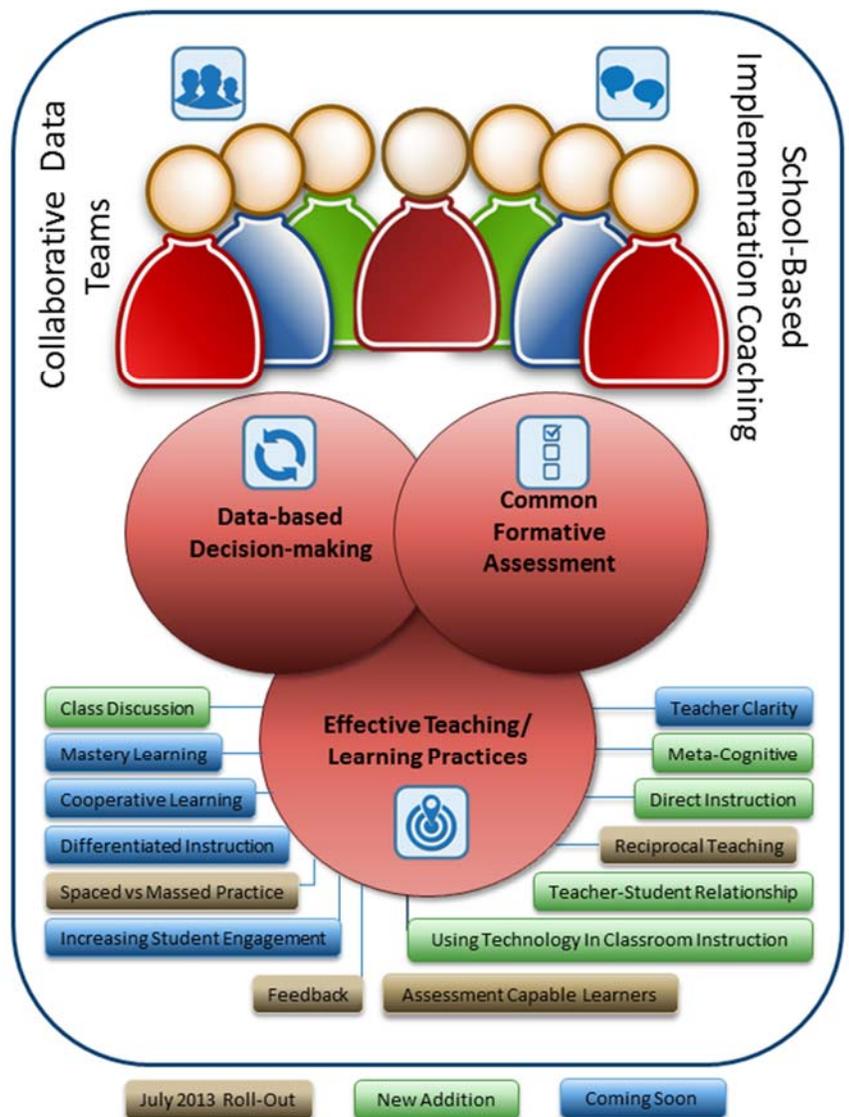
156842 PreK-12 Students

20865 Students with Disabilities

2229 Special Education Teachers

10573 General Education Teachers

529 Administrators



MO SPDG Supports Collaborative Work

Throughout the five years of the grant, the Missouri SPDG will develop training tools, structures, and processes that will ensure high quality professional development statewide. We understand that conventional forms of professional development (i.e., one-shot workshops and conferences) do not provide the support needed to modify teaching practices.¹ Effective professional development needs to be authentic and ongoing.² Furthermore, professional development should address adult learning methods to ensure effectiveness through levels of instruction (i.e., introduce, illustrate, practice, evaluate, reflect, and master).

SPDG Learning Packages

Statewide collaborative teams developed “Learning Packages.” A ‘learning package’ is a focused approach to professional development content that:

- ◆ addresses adult learning principles and
- ◆ upholds specific characteristics of high quality professional development, and focuses on implementation at the classroom level.

Learning Package Components

Component	Purpose	Examples of Content
Preparation	Provide opportunity for learners to engage in the content prior to the formal training.	Learning objectives Expectations for the training Preparatory reading Reflection exercise
Opening & introductions	Provide an overview of the day, including reviewing learner objectives, outcomes, and essential questions.	Session at-a-glance Introductions Essential questions Norms Pre-assessment
Why the topic is important	Review the basics and relevance to student learning.	Implications for student learning Ways implementation aligns with MO Learning Standards
Overview of the topic	Provide learner with core concepts, terms, and vision for implementation.	Core concepts Glossary of terms Implementation example
Unpacking the topic	Explore the core components and implementation steps.	Detailed description of the core components Rationale for components Detailed implementation steps
Topic in practice	Provide opportunity for learners to discuss what application in the classroom looks like.	Detailed description of what implementation looks like Group discussion on what implementation looks like in a variety of contexts Measuring fidelity Using data to inform practice
Topic in action	Explore ways for the learners to incorporate the new knowledge and skills into their teaching.	Reflection on what implementation would look like in their classrooms Discuss and problem-solve potential challenges to implementation and fidelity drift
Assessment & reflection	Provide opportunity for the learners to reflect on their learning and potential implementation challenges.	Post-assessment learner knowledge Reflect on personal teaching context and implementation
Closing & follow-up	Provide opportunity for learner to outline their implementation steps and plans for follow-up coaching.	Template for outlining implementation steps in personal teaching contexts and follow-up coaching Additional resources for further learning

¹Asayesh, 1993; Guskey & Huberman, 1995

²Boudah, Blair & Mitchell, 2003; Trivette, Dunst, Hamby & O’Herin, 2009

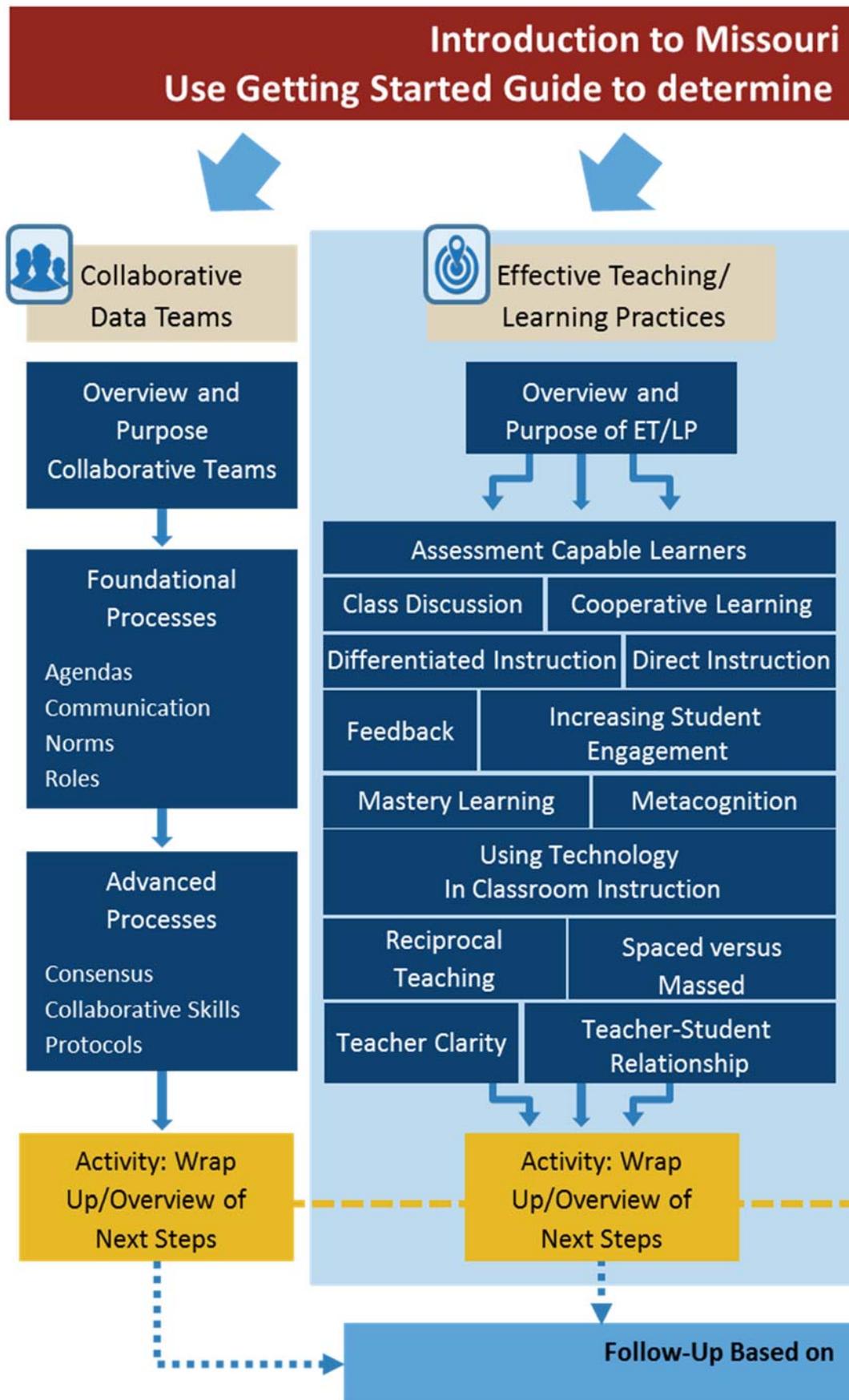
About

Scope of Learning Packages version 2.0

Scope of the Learning Packages Training & Coaching

Collaborative Work schools begin with an Introduction to Collaborative Work and a discussion using the Getting Started Guide. From that point, they plan how to proceed through the content in a way that builds on current implementation strengths and assists teachers to improve their teaching practices.

School-based Implementation Coaching provides the necessary training to help proficient teachers build skills in providing peers feedback with an ultimate goal of school-wide implementation with fidelity.



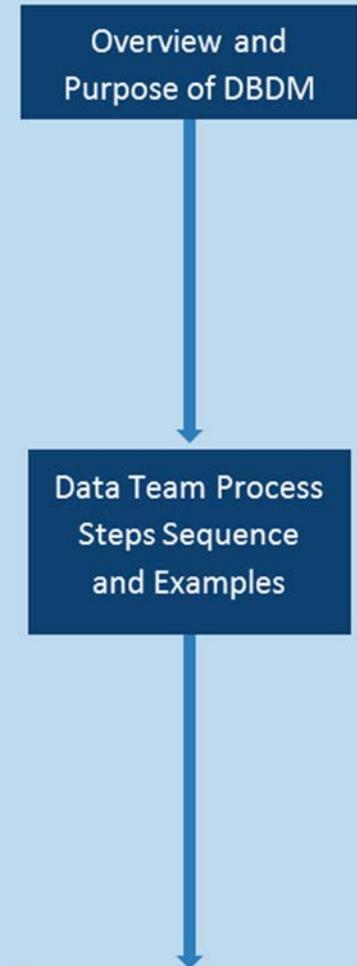
December 2013



Collaborative Work starting point and scope of learning

- Getting Started
- Focus Areas
- Collaborative Work Training
- Wrap Up Activity
- Follow-up to Training

- Common Formative Assessment
- Data-Based Decision Making
- School-Based Implementation Coaching



Moving toward school-wide implementation



Data: Coaching and Revisiting PD

Follow-Up Based on Data: Coaching and Revisiting PD

About

Infographics | Practice Profiles

Infographics

Infographics can be a valuable communication tool. As a visual representation of data or information, infographics can effectively tell a story, illustrate implementation, and highlight data to emphasize key points.

Why are infographics effective?

- Short Attention Spans.** Information is on-demand and instant access to information is expected. Infographics help focus on the important pieces of information to get the learner started.
- Information Overload.** There is a constant flow of information through the internet and our on-the-go access through smartphones, tablets, and computers. We are continuously receiving, analyzing, sharing, and creating new information. A visualization that effectively combines the right text with the right data is compelling and helps us to focus on important information.
- Easy to Understand.** Infographics have potential to make complex information easier to understand. For learners who tend to more quickly interpret visual information, infographics can be very powerful.
- Making facts easy to remember.** The visualization of information helps learners to retain the information. By pairing graphics, pictures, and data, the text is made more memorable.
- More Engaging.** Infographics can offer a more engaging way to access information. With visual interest, the information is more likely to be read, discussed, and shared.

How to use infographics

Infographics can be used to introduce learners to the topic. Each MO SPDG infographic gives rationale for why the practice is important and describes implementation of the practice. The infographics can also be used to assist a learner with revisiting the practice.

Coaching is a process!

Why coaching is important?

- Theory & Development:** I don't know how to use these skills in my classroom. It's transfer new skill into their practice after learning theory.
- Demonstration in Training:** I can demonstrate my new skills in training, but I still don't know how to use these in my classroom. Though 90% demonstrate skills in training, 0% transfer new skills to practice after seeing a demonstration in training.
- Practice & Feedback in Training:** I can demonstrate my new skills and get starting to understand how to use these in my classroom. It will transfer new skills to classroom after learning theory, using a demonstration, practicing and receiving corrective feedback during training.
- Coaching in Classroom:** I can use my new skills in my classroom. I am a better educator with coaching. After receiving coaching in the classroom, 90-95% were able to demonstrate knowledge and skill and use those skills in their classroom.

How coaching works? Because we value outcomes, 80% or more of the time spent on performance support should be devoted to "coaching" practitioners how to do the intervention, better and better over time.

When is coaching needed?

1. When learning for the first time
2. When wanting to learn more
3. When trying to remember and/or apply
4. When things change
5. When something goes wrong

Who needs coaching?

Individual Teacher

Teachers and teams improve practices

Teachers help peers learn new practices

Coaching for Better Instruction = Improved Outcomes

Effective Teaching/Learning Practices

What is effective? Effective Teaching/Learning Practices at the classroom level are evidence-based methods that are not content related, which have the capacity to produce sustained, positive results for every student, when implemented with fidelity and monitored/informed through data.

Four Effective Teaching/Learning Practices

- Assessment Capable Learners:** The practice of Assessment Capable Learners involves students regulating and facilitating their own learning by accurately and appropriately answering the following questions: 1) Where am I going?, 2) Where am I now?, 3) How do I close the gap? (1.44 effect size)
- Reciprocal Teaching:** Reciprocal Teaching involves students summarizing, questioning, clarifying, and predicting; students take turns being the teacher. (0.74 effect size)
- Feedback:** Feedback is an integral aspect of instruction and learning using information provided by an agent (e.g. teacher, peer, book, parent, self/experience, computer) regarding aspects of one's performance or understanding. (0.73 effect size)
- Spaced Practices:** Spaced Practices are conditions in which individuals are given rest intervals within the practice session. Studies show this method is more effective than Massed Practices in which individuals practice a task continuously without rest. (0.71 effect size)

Assessment Capable Learners

Who are Assessment Capable Learners? Students who:

- know the learning target for the lesson
- can describe where they are in relation to the criteria
- use that information to select learning strategies to improve their work

Benefits: When students self-assess regularly, track and share their progress, their confidence as learners grows. Their motivation to do well increases as does their achievement.

Closing the Gap: Not progressing, I am not sure how to do this yet. Getting better, I'm starting to understand what to do. Well's eye! I can do this with all the help!

Effect Size: 1.44

Assessment Capable Learners (1.44 effect size)

- Students engage in reflective review (revision)
- Students can be encouraged to set questions and create solutions (refine)
- Students apply scoring criteria through peer assessment and self-assessment (rework)

Practice Profiles

Implementation with fidelity requires clearly described implementation criteria. The practice profile framework has recently been developed by the National Implementation Research Network (NIRN) as a way of outlining implementation criteria using a rubric structure with clearly defined practice-level characteristics (NIRN, 2011).

Why are practice profiles effective?

Practice profiles describe the essential functions and implementation. The MO SPDG template uses four implementation levels for each essential function. The rubric format gives examples of what expected implementation looks like as well as emerging or growing levels of implementation.

How to use practice profiles

The essential functions align with the teaching/learning objectives for each learning package. For each teaching/learning objective there are levels of implementation. For some essential functions, proficient and exemplary implementation criteria are the same and in others, criteria differ. Close to proficient levels of implementation suggest the skill or practice is emerging and coaching is recommended for moving toward more proficient implementation. When implementation is reported at the far from proficient level, follow-up professional development in addition to coaching is recommended.

Missouri Collaborative Work Practice Profile				
Foundations present in the implementation of each essential function: <i>Commitment to the success of all students and to improving the quality of instruction.</i>				
Assessment Capable Learners Practice Profile				
Essential Function	Exemplary proficiency Ideal Implementation	Proficient	Close to Proficient <i>(Skill is emerging, but not yet to ideal proficiency. Coaching is recommended.)</i>	Far from Proficient <i>(Follow-up professional development and coaching is critical.)</i>
1 Educators teach students to determine, "Where am I going?"	When teaching students to develop learning goals, all of the following criteria are occurs 80% of the time. <ul style="list-style-type: none"> • Educator writes targets using student-friendly language. • Educator models using "I can ____," or "I know ____" statements. • Educator develops rubric with students • Educator analyzes student work with the students using exemplary and non-exemplary examples 	When teaching students to develop learning goals, all of the exemplary criteria occurs, but <80% of the time.	When teaching students to develop learning goals, some of exemplary criteria occur.	When teaching students to develop learning goals, none of exemplary criteria occur.
2 Educators teach students to determine, "Where am I now?"	When teaching student to self-evaluate learning progress, all of the following criteria occurs 80% of the time. <ul style="list-style-type: none"> • Educator provides descriptive feedback • Educator asks students to assess their own progress by asking themselves some key questions about where they are in their learning • Educators instruct students to self-assess, justify and set goals 	When teaching student to self-evaluate learning progress, all of the exemplary criteria occurs, but <80% of the time.	When teaching student to self-evaluate learning progress, some of exemplary criteria occur.	When teaching student to self-evaluate learning progress, none of exemplary criteria occur.
3 Educators teach students to determine, "How can I close the gap?"	When teaching students to identify next learning steps, all of the following criteria occur 80% of the time. <ul style="list-style-type: none"> • Educator assists the student in determining what might be some of the next instructional steps • Educator teaches the student to self-reflect, document, and share their learning 	When teaching students to identify next learning steps, all of the exemplary criteria occurs, but <80% of the time.	When teaching students to identify next learning steps, some of exemplary criteria occur.	When teaching students to identify next learning steps, none of exemplary criteria occur.

Evidence: Assessment Capable Learners Fidelity Checklist, lesson plans

The professional development provider should walk through the practice profile with the leaders-educators-learners. It is an important tool for self-monitoring their own implementation because it serves as a reminder as to the implementation criteria and is also aligned with the fidelity checklists.

Collaborative Data Team

Infographic | Learning Objectives and Components

Collaborative Data Teams

Why Collaborate?

“Quality teaching is not an individual accomplishment, it is a result of a collaborative culture that empowers teachers to team up to improve student learning beyond what any one of them can achieve alone.”

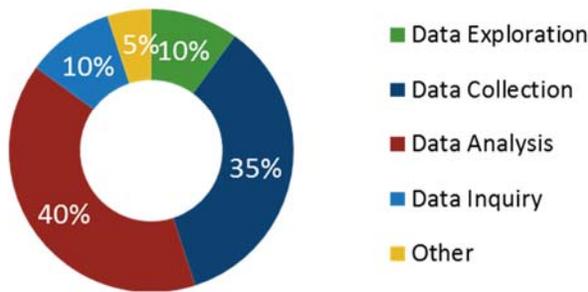
(Carroll, 2009, p. 13)

“...the most significant result was an increase in teacher morale and motivation.”

(Hord, 2008)

The Research

Collaborative Data Teams set the stage for data inquiry; without it teams tend to focus on...



The issue with little data inquiry is that collaborative teams need to shift their focus from looking at student work to looking at student thinking.

(Slavit, Nelson, and Deuel June 2012)

The Big Idea!

The Process

High functioning Collaborative Data Teams use data to address these 3 questions:

- What is it we want students to learn?
- How will we know when each student has learned it?
- How can we improve on current levels of student achievement? (DuFour, R. 2004)

For improved outcomes for all students, educators need to know:

THE WHY...

To improve future student outcomes by becoming more skilled educators.

THE HOW...

Educators effectively utilize team processes. Team processes are critical!



THE WHAT...

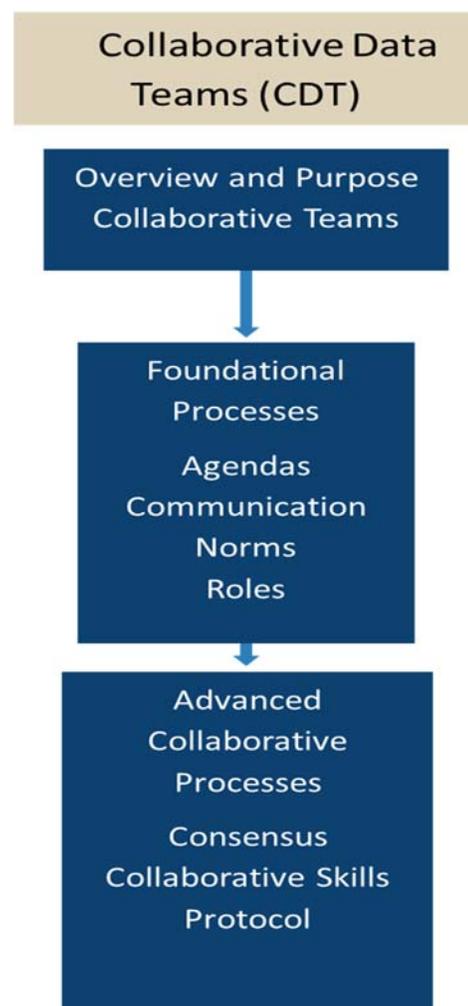
Educators intentionally collaborate about the most effective practices within curriculum, instruction, assessment, and school climate.



Learning Objectives

- ◆ Educators collaboratively develop common purposes and goals for improved student outcomes within a culture that embraces continuous school improvement.
- ◆ Educators effectively utilize team processes (agendas, minutes, dialogue and discussion, norms, logistics, consensus, roles, decision-making skills, protocols).
- ◆ Educators intentionally collaborate about the most effective practices within curriculum, instruction, assessment, and climate.

Learning Package Components



Collaborative Data Team

Practice Profile

Missouri Collaborative Work Practice Profile

Foundations present in the implementation of each essential function: *Commitment to the success of all students and to improving the quality of instruction.*

Collaborative Data Team		
Essential Functions	Exemplary Ideal Implementation (All items are in place.)	Proficient
1	Educators collaboratively develop common purposes and goals for improved student outcomes within a culture that embraces continuous school improvement.	Teams address <u>each</u> of the following <u>at least twice</u> monthly, as evidenced by agendas and minutes. Discussing data and monitoring student progress Identifying instructional practices that result in student learning. Identifying students needing re-teaching Aligning instructional practices to academic standards.
2	Educators effectively implement group processes (agendas, minutes, dialogue, and discussion, norms, logistics, consensus, roles, decision-making skills, protocols).	Teams meet weekly for approximately 45 minutes, with appropriate team members participating.
		Teams utilize agendas which include: Team/Group Name, Date/Time/Location, Outcomes (includes required materials), Past items to review, New items, Celebrations, Norms, and Next meeting date.
		Teams utilize minutes and communication which include: purpose for the meeting, where and when held, list of the attendees, what was achieved during the meeting, decisions made at the meeting, actions that were agreed, include the action itself, who it was assigned to, and the completion date, central place to store document (minutes won't get lost in inbox or on server), easy access for all participants to provide updates and comments, distributed to all stakeholders, and agenda serves as template for minutes.
		Teams have collaboratively developed and routinely use norms. They regularly evaluate their adherence to those norms and are willing to hold one another accountable.
3	Educators intentionally collaborate about the most effective practices within curriculum, instruction, assessment and climate.	Teams utilize roles, with multiple people on the team able to assume various roles. Teams have developed roles that are appropriate to their setting, and have defined those roles.
		During <u>all</u> team meetings, problem-solving and sharing involves <u>all</u> of the following collaborative behaviors. (See module handout for detailed description of each) Pausing, Paraphrasing, Posing questions, Putting ideas on the table, Providing data, Paying attention to self and others, and Presuming positive intentions.
		During <u>80%</u> of team meetings, problem-solving and sharing involves <u>at least 5</u> of the following collaborative behaviors. (See module handout for detailed description of each) Pausing, Paraphrasing, Posing questions, Putting ideas on the table, Providing data, Paying attention to self and others, and Presuming positive intentions.



Close to Proficient <i>(Skill is emerging, but not yet to ideal proficiency. Coaching is recommended.)</i>	Far from Proficient <i>(Follow-up professional development and coaching is critical.)</i>	Evidence
Monthly agendas and minutes show <u>some but not all</u> of the four items are addressed.	Monthly agenda and minutes show <u>none</u> of the items are addressed.	Agendas/Minutes from each CDT indicate areas of focus addressed
Meetings occur regularly as scheduled, but for less than 45 minutes or occur alternating weeks.	Meeting times are irregular, infrequent, and/or often cancelled.	Building schedule for CDT meetings, as well as minutes confirming fidelity to schedule
Agenda include most recommended items, but not all.	Agendas include a few recommended items, no recommended items, or are not developed.	Agendas/Minutes from each CDT indicate areas of focus addressed
Minutes include most recommended items, but not all.	Minutes include a few recommended items, no recommended items, or are not developed.	CDT Minutes are archived and Communication structure is established
Norms are developed, but not used routinely.	Norms are not developed.	CDT Meeting documents indicate norms are utilized in meetings
Roles are usually assigned, but not always.	Roles are seldom or not assigned.	CDT Meeting documents indicate roles are agreed on and utilized in meetings
< <u>80%</u> of team meetings, problem-solving and sharing involves <u>≤ 5</u> of the following collaborative behaviors. (See module handout for detailed description of each)	The collaborative behaviors do not occur during team meetings.	Team Functioning Checklist



Collaborative data teams
allow educators to work interdependently to study and communicate the impact of their teaching, using evidence of student progress to improve outcomes for all students. These teams set the stage for data inquiry, during which the focus shifts from how students work to how students think.

Data-Based Decision Making

Infographic | Learning Objectives and Components

Data-Based Decision-Making

Definition

Using Student Data to Support Instructional Decision-Making

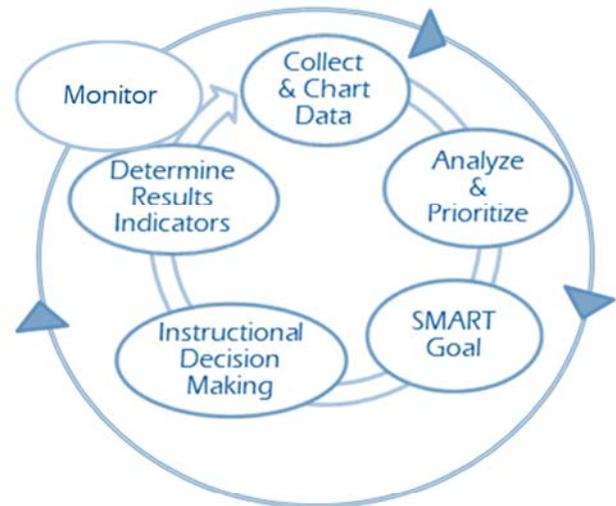
Data-based Decision-making (DBDM) = small teams meeting regularly and using an explicit, data-driven structure to:

- ❑ disaggregate data,
- ❑ analyze student performance,
- ❑ set incremental student learning goals,
- ❑ engage in dialogue around explicit and deliberate classroom instruction, and
- ❑ create a plan to monitor instruction and student learning.

Purpose

- ❑ Make data part of an ongoing cycle of instructional improvement
- ❑ Teach students to examine their own data and learning goals
- ❑ Establish a clear vision for school-wide data use
- ❑ Provide supports that foster a data-driven culture within the school
- ❑ Develop & maintain a district-wide data system

The Process



Benefits

Using a DBDM process shifts the work of school leadership teams from a reactive or crisis driven process to a pro-active, outcomes driven process, and sets the stage for continuous improvement.

Gilbert, 1978; McIntosh, Horner & Sugai, 2009

Essential Questions

How many students are succeeding in the subject I/we teach?

Within those subjects, what are the areas of strengths and weakness?

How can I/we establish and sustain a culture and process for strategic instructional decision making across our building, teams and classrooms?



Mike Schmoker



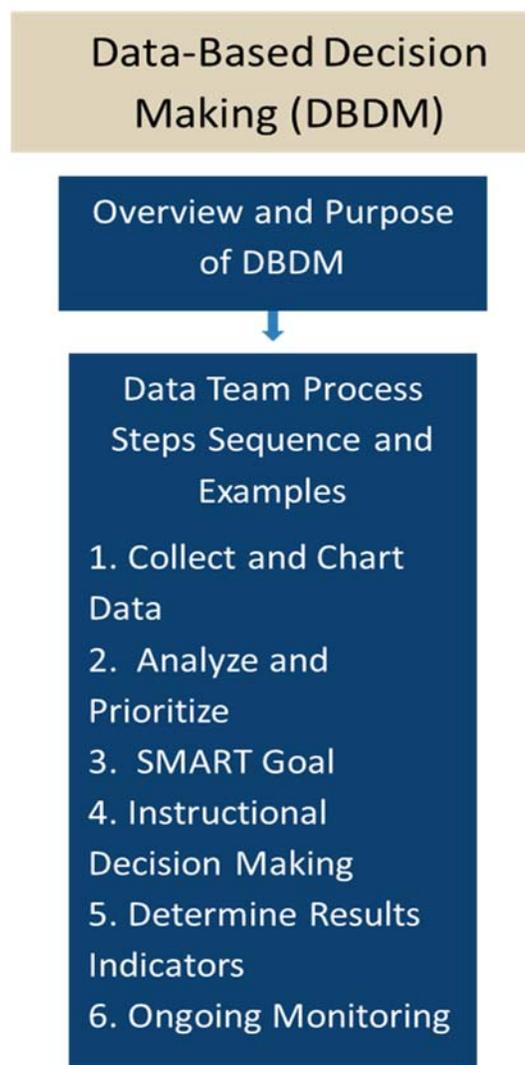
Learning Objectives

- ◆ Educator utilizes steps of DBDM “Cycles” with their classroom data.
- ◆ Educator will collect, chart, analyze and disaggregate student learning data as well as implementation data.
- ◆ Educator will explain results indicators for process (cause) and product (effect).
- ◆ Educator will design ongoing monitoring of results (monitor, reflect, adjust, repeat).



Data-based decision making involves small teams meeting regularly and using an explicit, data-driven structure to disaggregated data, analyze student performance, set incremental student learning goals, engage in dialogue around explicit and deliberate classroom instruction, and create a plan to monitor instruction and student learning.

Learning Package Components



Data-Based Decision Making

Practice Profile

Missouri Collaborative Work Practice Profile

Foundations present in the implementation of each essential function: *Commitment to the success of all students and to improving the quality of instruction.*

Data-Based Decision Making Process			
Essential Functions		Exemplary Ideal Implementation	Proficient
1	Educators collect, chart, analyze and disaggregate student learning data.	<p>>80% of teachers administer common formative assessment and use common scoring method to evaluate student proficiency.</p> <p>>80% of teachers share charted class data with the data team.</p> <p>Sums and percentages are correct.</p> <p>Results are disaggregated according to specific school needs (e.g., specific subgroups).</p> <p>Results are available to ALL team members.</p> <p>Data is triangulated (multiple sources of data are included that further illuminates students' knowledge of skill and the area being examined).</p>	<p>80% of teachers administer common formative assessment and use common method to evaluate student scoring proficiency.</p> <p>80% of teachers share charted class data with the data team.</p> <p>Sums and percentages are correct.</p> <p>Results are partially disaggregated.</p> <p>Results are available to ALL team members.</p> <p>Data is not triangulated.</p>
2	Educators use results to identify learning needs.	<p>Team lists strengths, misconceptions, inferences, and prioritized needs for all proficiency groups.</p> <p>Strengths and misconceptions are directly related to the common formative assessment and targeted standard(s).</p> <p>Prioritized needs are categorized according to a hierarchy of prerequisite skills.</p>	
3	Educators establish SMART goals based on data identified student learning needs.	<p>SMART goals contain all key components (as listed in Proficient column):</p> <p>Goals reflect a consideration of students "close to-proficient" and case-by-case consideration of what other students can reach the goal.</p> <p>Goals are derived from specific team inferences.</p> <p>Each goal includes baseline and anticipated post-assessment.</p> <p>Each goal closes achievement gaps for targeted student groups.</p> <p>Goals are few and prioritized.</p> <p>Scheduled time set for formal analysis of results.</p>	<p>All SMART goals...</p> <p>Are specific to targeted subject area, grade level, and student population.</p> <p>Are measurable.</p> <p>Specify how measurement will occur.</p> <p>Achievable percentage gains or increases in terms of expected change.</p> <p>Time when the assessment will take place.</p>
4	Educators use data to select a common effective teaching/learning practice to implement with fidelity.	<p>Selected effective teaching/learning practice(s)/strategy(s) target prioritized needs and are research based.</p> <p>Selected effective teaching/learning practice(s)/strategy(s) have greatest potential impact on student growth.</p> <p>Selected effective teaching/learning practice(s)/strategy(s) are described in detail to allow for replication.</p>	
5	Educators explain results indicators for process (cause) and product (effect).	<p>Quarterly, team discusses expected implementation data (teacher behavior) related to expected student results, with sufficient detail for replication.</p> <p>Implementation data indicated fidelity occurs at a desired rate.</p> <p>Quarterly, discrepancies in student results are examined in related to difference in implementation data.</p> <p>Semi-annually, based on data, improved implementation processes are recommended or alternative effective teaching/learning practice is chosen.</p>	
6	Educators design ongoing monitoring of results (monitor, reflect, adjust, repeat).	<p>Visual representation of growth is included in results once post-assessment is scored.</p> <p>Reflection questions are thoroughly discussed and recorded using the visual representation.</p>	<p>Visual representation of growth is included in results once post-assessment is scored.</p> <p>Most reflection questions are discussed and recorded using the visual representation.</p>

*Evidence: Fidelity Checklist, Student Data



<p style="text-align: center;">Close to Proficient <i>(Skill is emerging, but not yet to ideal proficiency. Coaching is recommended.)</i></p>	<p style="text-align: center;">Far from Proficient <i>(Follow-up professional development and coaching is critical.)</i></p>	<p style="text-align: center;">Evidence</p>
<p><80% of teachers administer common formative assessment and use common scoring method to evaluate student proficiency. <80% of teachers share charted class data with the data team. Sums and percentages are calculated, but contain errors. Results are not disaggregated. Results are available only to team members present for the meeting. Data is not triangulated.</p>	<p>Few or no teachers administer common formative assessment and use common scoring method to evaluate student proficiency. Class data is not charted and/or shared.</p>	<p>Data-Based Decision Making Excel/Word Template</p>
<p>Team lists strengths, misconceptions, inferences, and prioritized needs for most proficiency groups. Strengths and misconceptions are mostly related to the pre-assessment and targeted standard(s). Pre-requisite skills are not considered.</p>	<p>Strengths and misconceptions, if listed, are not related to the pre-assessment and targeted standard(s). Learning needs are not prioritized. Pre-requisite skills are not considered.</p>	<p>Data-Based Decision Making Excel/Word Template</p>
<p>SMART goals are written and mostly meet the criteria of SMART goal. Goal percentage is not correctly calculated.</p>	<p>If complete, SMART goals lack important criteria. Goal percentage is not correctly calculated.</p>	<p>Data-Based Decision Making Excel/Word Template</p>
<p>Selected effective teaching/learning practice(s)/strategy(s) target prioritized needs and are research based. Selected effective teaching/learning practice(s)/strategy(s) chosen have moderate potential to impact student growth. Selected effective teaching/learning practice(s)/strategy(s) lack a full description to allow for replication.</p>	<p>Selected effective teaching/learning practice(s)/strategy(s) do not target prioritized needs and are not research based. Selected effective teaching/learning practice(s)/strategy(s) chosen do not have potential to impact student growth. Selected effective teaching/learning practice(s)/strategy(s) lacks a description to allow for replication.</p>	<p>Data-Based Decision Making Excel/Word Template</p>
<p>Semi-annually, team discusses expected implementation data (teacher behavior) related to expected student results, with sufficient detail for replication. Implementation data indicated fidelity occurs at less than a desired rate. Semi-annually, discrepancies in student results are examined in related to difference in implementation data. Annually, based on data, improved implementation processes are recommended or alternative effective teaching/learning practice is chosen.</p>	<p>Team discussion about expected implementation data and students occurs but is limited by team understanding of cause/effect or incomplete data. Fidelity of implementation is less than desired. Hypothesizing improved implementation processes or needs or alternative effective teaching/learning practices is limited by team understanding of the correlation or incomplete data.</p>	<p>Data-Based Decision Making Excel/Word Template</p>
<p>Visual representation of growth is included in results once post-assessment is scored. Some or few reflection questions are discussed and recorded using the visual representation.</p>	<p>Visual representation of growth is not included in results. Reflection questions are not discussed and/or recorded.</p>	<p>Data-Based Decision Making Excel/Word Template</p>

Common Formative Assessment

Infographic | Learning Objectives and Components

Common Formative Assessment

What is Common Formative Assessment?

- ❑ **Common** = Given by all teachers at a grade level or in a content area
- ❑ **Formative** = Provides data to inform planning and instruction
- ❑ **Assessment** = Provides analytical rather than evaluative information

Cook & Negron 2009

It is a process!

Questions to Consider

What is the difference between assessment OF learning and assessment FOR learning?

- ❑ What types of assessments do we currently use?
- ❑ Who analyzes the assessment results?
- ❑ What functions should assessment instruments have to provide greatest leverage?
- ❑ How can I best use selected and constructed response questions, performance evaluation, and rubrics?



The Learning Process

“Assessment is not something that is done to students separate and apart from instruction; assessment must be – *must* be seen to be – something that is done with students as an integral part of the learning process.”

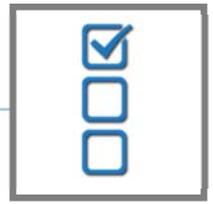
Ken O’Conner, 2002

Benefits

Team-developed Common Formative Assessments:

- ❑ are a more efficient use of teachers time.
- ❑ are more equitable for students.
- ❑ are more effective in monitoring and improving student learning.
- ❑ can *inform and improve* the practice of both individual teachers and teams of teachers.
- ❑ can build the capacity of the team to achieve at higher levels.
- ❑ are essential to systematic interventions when students do not learn.

Rick DuFour, Becky DuFour, Bob Eaker (Sept., 2007)



Learning Objectives

- ◆ Understand the clear purposes of assessment by clarifying:
 - Why they are assessing?
 - Who will use the results of assessment data?
 - What they will do with the assessment data?
- ◆ Develop clear and meaningful learning targets to guide instruction and student learning.
- ◆ Construct quality assessment instruments which are of sound design and measure the learning targets.

Learning Package Components



Common Formative Assessment

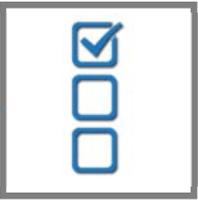
Practice Profile

Missouri Collaborative Work Practice Profile

Foundations present in the implementation of each essential function: *Commitment to the success of all students and to improving the quality of instruction.*

Common Formative Assessment	
Essential Functions	Exemplary Proficiency Ideal Implementation
1 Educators develop clear and meaningful learning goals to guide instruction and student learning.	<p>All of the following criteria are met.</p> <ul style="list-style-type: none"> Learning goal is clearly connected to a big idea/essential learning in the domain Learning goal develops deep understanding of underlying concepts and/or acquisition of skills Learning goal clearly engages higher order thinking processes Learning goal is clearly manageable and can be accomplished in the course of a lesson or unit (may be several periods) Learning target is clearly explained to students Connections between current learning goal and prior learning are clearly made
2 Educators establish clear and measurable student success criteria in a rubric, scoring guide, or checklist.	<p>All of the following criteria are met.</p> <ul style="list-style-type: none"> Success criteria are clearly and effectively aligned to learning goals Success criteria clearly and effectively relate to what students will say, do, make or write to show evidence of learning Success criteria clearly and effectively reflect ways for students to indicate their current status relative to the learning goals Success criteria are communicated in language student can fully understand Success criteria are frequently referred to during the learning process.
3 Educators construct quality assessment instruments which are of sound design and measure the learning goals.	<p>All of the following criteria are met.</p> <ul style="list-style-type: none"> Multiple formative assessment strategies are used to collect data on student learning during the learning process. The formative assessment strategies are fully aligned with learning goal and success criteria The common formative assessment is clearly appropriate for the purpose of generating data in relation to the success criteria The formative assessment strategies are consistently and strategically placed during the course of the learning process. The formative assessment strategies provide opportunities for students to clearly show where they are in relation to mastery of the learning goal.
4 Educators use assessment data to improve student learning.	<p>All of the following criteria are met.</p> <ul style="list-style-type: none"> The teachers' decisions about next steps are completely based on evidence The teacher takes clearly appropriate action based on evidence (e.g., to continue as planned, scaffold, give student feedback, shift focus) The teacher feedback to students is clearly aligned with the learning target and success criteria The feedback consistently provides clues, hints or suggestions to students about what they can do to progress from their current learning status toward the desired learning target.

*Evidence: Fidelity Checklist, Student Data



Proficient	Close to Proficient <i>(Skill is emerging, but not yet to ideal proficiency. Coaching is recommended.)</i>	Far from Proficient <i>(Follow-up professional development and coaching is critical.)</i>	Evidence
At least 6 of the criteria are met.	At least 4 of the criteria are met.	Less than 4 of the criteria are met.	Common Formative Assessment Development & Implementation Template.
At least 3 of the criteria are met.	At least 2 of the criteria are met.	Less than 2 of the criteria are met.	Common Formative Assessment Development & Implementation Template.
At least 3 of the criteria are met.	At least 2 of the criteria are met.	Less than 2 of the criteria are met.	Common Formative Assessment Development & Implementation Template.
At least 3 of the criteria are met.	At least 2 of the criteria are met.	Less than 2 of the criteria are met.	Common Formative Assessment Development & Implementation Template.



Common formative assessment at the classroom level is a systematic and cyclical process designed to provide timely teacher/student feedback on curricula and student learning to improve both instructional practices and academic achievement.

Effective Teaching and Learning Practices

Infographic | Learning Objectives and Components

Effective Teaching/Learning Practices

What is Effective?

Effective Teaching/Learning Practices at the classroom level are evidence-based methods that are not content related, which have the capacity to produce sustained, positive results for every student, when



implemented with fidelity and monitored/informed through data.

Research Shows

Ways in which educators promote thinking through their teaching practices can enhance students' information processing, motivation for learning and cognitive development.

Ames & Archer (1998)

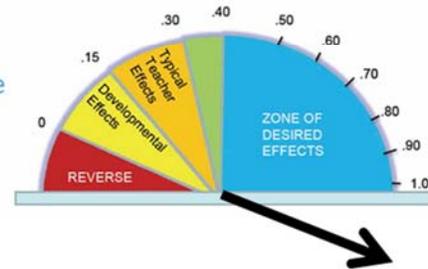


Four Effective Teaching/Learning Practices

Assessment Capable Learners

The practice of **Assessment Capable Learners** involves students regulating and facilitating their own learning by accurately and appropriately answering the following questions: 1) **Where am I going?**; 2) **Where am I now?**; 3) **How do I close the gap?**

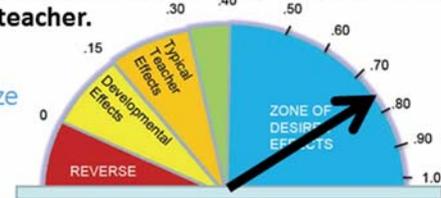
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Reciprocal Teaching

Reciprocal Teaching involves students **summarizing, questioning, clarifying, and predicting**; students **take turns being the teacher**.

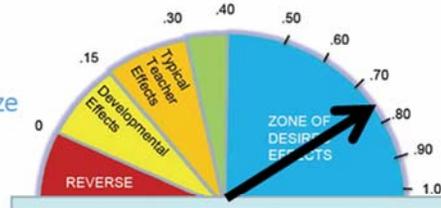
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Feedback

Feedback is an integral aspect of instruction and learning **using information provided by an agent** (e.g. teacher, peer, book, parent, self/experience, computer) **regarding aspects of one's performance or understanding**.

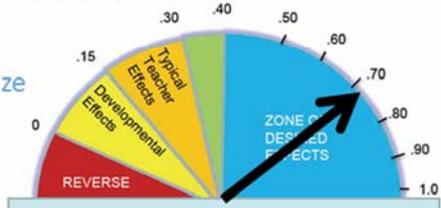
0.73 effect size



Spaced vs Massed Practice

Spaced Practices are conditions in which individuals are given **rest intervals within the practice session**. Studies show this method is more effective than **Massed Practices** in which individuals **practice a task continuously without rest**.

0.71 effect size



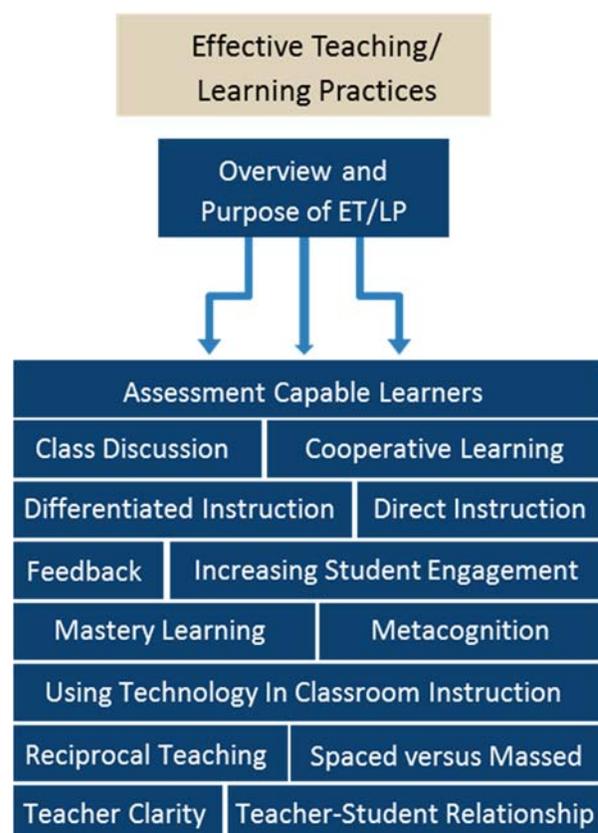
Hattie (2009)



Learning Objectives

- ◆ Define an effective teaching/learning practice and rationale for utilizing effective practices.
- ◆ Describe the four Effective Teaching/Learning Practices and benefits of each.
 - Assessment Capable Learners
 - Feedback
 - Reciprocal Teaching
 - Spaced vs. Massed Practice
- ◆ Understand that each practice aligns with the Missouri Teacher Standards.
- ◆ Explain how the Effective Teaching/Learning Practices will be implemented at the building, data team, and classroom levels.
- ◆ Plan key steps to avoid implementation and fidelity drift.

Learning Package Components



Effective Teaching and Learning Practices

Practice Profile

Missouri Collaborative Work Practice Profile

Foundations present in the implementation of each essential function: *Commitment to the success of all students and to improving the quality of instruction.*

Effective Teaching & Learning Practices				
Essential Functions		Exemplary Ideal Implementation	Proficient	Close to Proficient <i>(Skill is emerging, but not yet to ideal proficiency. Coaching is recommended.)</i>
1	Educators maintain an effective teaching/learning environment.	Establish and teach clearly articulated academic and behavioral classroom rules and procedures; <u>implement consistently</u> , and <u>demonstrate</u> methods to assure all students understand how and when to use them.	Establish and teach clearly articulated academic and behavioral classroom rules and procedures; <u>implement consistently</u> , and can <u>describe</u> methods of assuring all students understand how and when to use them.	Establish and teach clearly articulated academic and behavioral classroom rules and procedures; <u>implement them at beginning of year</u> , and can <u>describe</u> methods of assuring all students understand how and when to use them.
2	Educators implement appropriate effective teaching/learning practices.	Select and implement evidence-based effective methods that are not content related, implement with fidelity and inform decisions of progress through regularly scheduled formative assessments selected by appropriate teams.	Select and implement evidence-based effective methods that are not content related, implement with fidelity and inform decisions of progress through assessment methods selected by the instructor.	Select and implement evidence-based effective methods that are not content related, state are implemented with fidelity, and inform decisions of progress through assessment methods selected by the instructor.
3	Educators use data to assess progress implementing effective teaching/learning practice.	Select research-based formative assessment methods that include clearly defined outcomes, a problem-solving model, structured assessment criteria, and selected & constructed responses.	Select research-based formative assessment methods that include outcomes, a problem-solving model, structured assessment criteria, and selected & constructed responses.	Select research-based formative assessment methods that include outcomes, a problem-solving model, assessment criteria, and selected & constructed response.
4	Educators collaborate with stakeholders.	Establish systems to support frequent & regularly scheduled team-based collaboration throughout the implementation and ongoing use of effective teaching/learning practices; along with active administrative participation.	Establish systems to support frequent & regularly scheduled team-based collaboration throughout the implementation and ongoing use of effective teaching/learning practices; along with active administrative support.	Establish systems to support regularly scheduled collaboration throughout the implementation and ongoing use of effective teaching/learning practices; along with active administrative support.



<p>Far from Proficient <i>(Follow-up professional development and coaching is critical.)</i></p>	<p>Evidence</p>
<p>Academic and behavioral classroom rules and procedures are <u>not established</u> or are established but <u>not taught</u>.</p>	<p>Academic and behavior instruction artifacts</p> <p>Lesson plans of rules taught</p> <p>Student data</p>
<p>Select and implement evidence-based effective methods that may or may not be content related, state are implemented with fidelity and inform decisions of progress through assessment methods selected by the instructor.</p>	<p>See evidence of data-based decision-making</p> <p>Student data</p> <p>Practice-specific fidelity checklists</p>
<p>Select research-based formative assessment methods that include outcomes, a problem-solving model, assessment criteria, and a selected responses.</p>	<p>Practice-specific fidelity checklists</p> <p>Student data</p>
<p>Establish systems to support regularly scheduled collaboration throughout the implementation of effective teaching/learning practices; along with administrative support.</p>	<p>See evidence supporting collaborative data teams</p>



Effective teaching/learning practices are evidence-based, implemented with fidelity and informed through data to produce positive, sustained results in every student.

Metacognition

Infographic | Learning Objectives and Components

Metacognition

What is Metacognition?

- Becoming aware of one’s own actions and their effects
- Posing internal questions to find information and meaning
- Developing mental maps, pictures, or plans
- Monitoring plans throughout a process and revising plans when they are not working
- Self-evaluating a completed plan

Costa 2008

Thinking about our thinking:

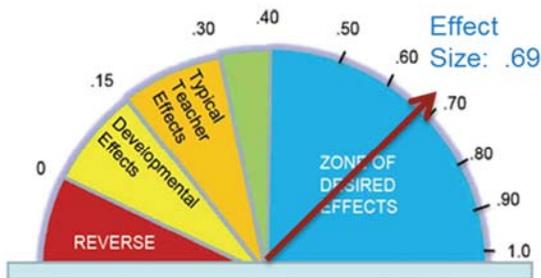


Impact of Metacognition

- Shapes active rather than passive learners
- Gives students a sense of control over learning
- Promotes “deep learning”
- Makes students aware of their own thinking

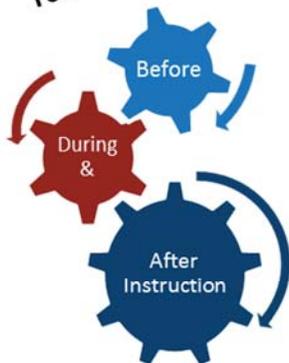
McElwee 2009

The Research



Four Types of Self-addressed Metacognitive Questions

Takes place:



Comprehension



Connection



Strategic



Reflection

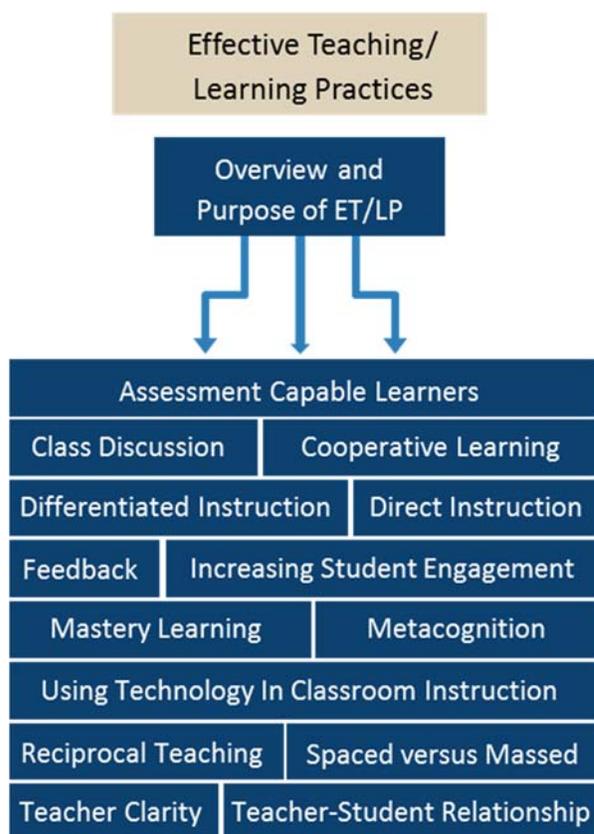




Learning Objectives

- ◆ Develop an understanding of metacognition including what it is and how it works.
- ◆ Identify an implement methods to help students use metacognitive skills.
- ◆ Explain metacognition and how to develop a culture of metacognition in the classroom.

Learning Package Components



Metacognition

Practice Profile

Missouri Collaborative Work Practice Profile

Foundations present in the implementation of each essential component: *Commitment to the success of all students and to improving the quality of instruction.*

Metacognition			
Essential Function		Exemplary proficiency Ideal Implementation	Proficient
1	Promoting a metacognitive environment.	When presenting students with a challenging task or skill the teacher always promotes a metacognitive environment by talking about her thinking and learning and thinking and learning in general.	When presenting students with a challenging task or skill the teacher routinely promotes a metacognitive environment by talking about her thinking and learning and thinking and learning in general.
2	Teaching students to become metacognitive.	When presenting students with a challenging task or skill the teacher models metacognitive practices before, during, and after learning. (Includes teaching and modeling thinking and reflection before, during, and after tasks, units, etc.)	When presenting students with a challenging task or skill the teacher routinely models metacognitive practices before, during, and after learning.
3	Cueing metacognition before learning.	When presenting students with a challenging task or skill the teacher always provides opportunity for students to think about the best way to approach the task or accomplish the learning target and connect to prior experiences. <i>Teacher uses cues with questions such as: "What are you trying to accomplish? What skills do you need to complete the task? How is the task like other tasks you have completed? What are your options and alternative approaches?"</i>	When presenting students with a challenging task or skill the teacher routinely provides opportunity for students to think about best way to approach the task or accomplish the learning target and connect to prior experiences.
4	Cueing metacognition during learning.	When presenting students with a challenging task or skill the teacher always provides opportunity for students to monitor progress in relation to learning target and success criteria. <i>Teacher uses cues with questions such as: "What skills do I still need to develop? How close am I to my goal? What strategies am I using? Are the strategies I am using helping me meet my goals? Are there other approaches that might help me reach the target?"</i>	When presenting students with a challenging task or skill the teacher routinely provides opportunity for students to monitor progress in relation to learning target and success criteria.
5	Cueing metacognition after learning.	When presenting students with a challenging task or skill the teacher always provides students opportunity to determine if learning target was met and reflect on what went well what did not go well and what to do differently next time. <i>Teacher uses cues with questions such as: "How has my thinking changed as I have gathered more information? How well did my choices work? Do I need to go back and re-read, re-do, or re-think anything?"</i>	When presenting students with a challenging task or skill the teacher routinely provides students opportunity to determine if learning target was met and reflect on what went well what did not go well and what to do differently next time.

*Evidence: Fidelity Checklist, Student Data



Close to Proficient <i>(Skill is emerging, but not yet to ideal proficiency. Coaching is recommended.)</i>	Far from Proficient <i>(Follow-up professional development and coaching is critical.)</i>
<p>When presenting students with a challenging task or skill the teacher occasionally promotes a metacognitive environment by talking about her thinking and learning and thinking and learning in general.</p>	<p>When presenting students with a challenging task or skill the teacher never promotes a metacognitive environment by talking about her thinking and learning and thinking and learning in general.</p>
<p>When presenting students with a challenging task or skill the teacher occasionally models metacognitive practices before, during, and after learning.</p>	<p>When presenting students with a challenging task or skill the teacher never models metacognitive practices before, during, and after learning.</p>
<p>When presenting students with a challenging task or skill the teacher occasionally provides opportunity for students to think about best way to approach the task or accomplish the learning target and connect to prior experiences.</p>	<p>When presenting students with a challenging task or skill the teacher never provides opportunity for students to think about best way to approach the task or accomplish the learning target and connect to prior experiences.</p>
<p>When presenting students with a challenging task or skill the teacher occasionally provides opportunity for students to monitor progress in relation to learning target and success criteria.</p>	<p>When presenting students with a challenging task or skill the teacher never provides opportunity for students to monitor progress in relation to learning target and success criteria.</p>
<p>When presenting students with a challenging task or skill the teacher occasionally provides students opportunity to determine if learning target was met and reflect on what went well what did not go well and what to do differently next time.</p>	<p>When presenting students with a challenging task or skill the teacher never provides students opportunity to determine if learning target was met and reflect on what went well what did not go well and what to do differently next time.</p>



Metacognition is the practice of teaching students how to think about thinking and develop the ability to monitor and regulate thinking *as* they work on a task. This reflection can occur before, during or after instruction and allows the student to process plans for reaching learning targets, focus on goals and the best way to achieve them, self-evaluate progress or determine what worked and what didn't.

Using Technology in Classroom Instruction

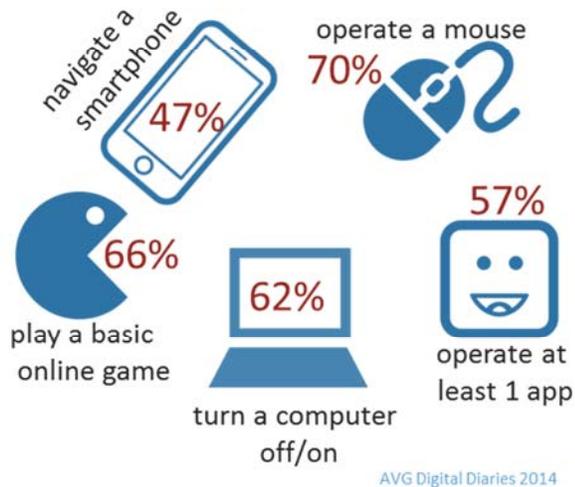
Infographic | Learning Objectives and Components

Using Technology in Classroom Instruction

The Definition

The use of hardware and software to enhance and provide opportunities for critical thinking, communicating clearly, collaborative learning, creative thinking, and problem solving in the classroom.

Tech Savvy Kids (ages 3-5) Can:



Kids Age 0-8 Access to Mobile Media



Successful Implementation

If we are preparing students for jobs **NOT YET CREATED** and to use technology

NOT YET INVENTED

THEN we need to teach kids how to use a variety of technology applications so they have a **wider knowledge base** to work with.

We should strive to teach students



Goals for Using Technology

WHAT DO YOU WANT KIDS TO DO WITH TECHNOLOGY?

WRONG ANSWERS	RIGHT ANSWERS
<ul style="list-style-type: none"> • MAKE PREZIS • START BLOGS • CREATE WORDLES • PUBLISH ANIMOTOS • DESIGN PLECHARTS • PRODUCE VIDEOS • Post to EDMODO • USE WHITEBOARD • DEVELOP APPS 	<ul style="list-style-type: none"> • RAISE AWARENESS • START CONVERSATIONS • FIND ANSWERS (TO THEIR QUESTIONS) • JOIN PARTNERS • CHANGE MINDS • MAKE A DIFFERENCE • TAKE ACTION • DRIVE CHANGE

Bill Ferriter 2013

TECHNOLOGY IS A TOOL, NOT A LEARNING OUTCOME.



Learning Objectives

- ◆ Gain awareness of how ISTE standards for teachers and students and the 21st Century Skills impact the implementation of technology in the classroom
- ◆ Examine the three pyramids for technology integration
- ◆ Begin planning for implementation of using technology in classroom instruction

Missouri Collaborative Work Practice Profile

Foundations present in the implementation of each essential component: *Commitment to the success of all students and to improving the quality of instruction.*

Using Technology in Classroom Instruction					
Essential Function	Ideal Implementation	Proficient	Close to Proficient <i>(Skill is emerging, but not yet to ideal proficiency. Coaching is recommended.)</i>	Far from Proficient <i>(Follow-up professional development and coaching is critical.)</i>	
1	The teacher models and facilitates opportunities for students to demonstrate the four learning and innovation skills.	Evidence of modeling and/or use of all four learning and innovation skills include: Critical Thinking Collaboration Communication Creativity	Teacher models and facilitates opportunities for 3 or 4 skills on a regular basis.	Teacher struggles to model and/or facilitate opportunities for more than 2 skills on a regular basis.	Teacher seems to only model and/or facilitate opportunities for 1 skill on a regular basis.
2	The teacher selects appropriate technology tools to meet the instructional needs of students.	All criteria are met. Appropriate for difficulty level of use Appropriate discussion of digital citizenship. Appropriate for selected age group. Appropriate for desired learning outcomes. Appropriate level of rigor is built in to assignment. Appropriate rubric or scoring guide is used for assessment.	Teacher meets 5 or more of the criteria on a regular basis.	Teacher meets 3 or 4 of the criteria on a regular basis.	Teacher only meets 1 or 2, if any, of the criteria on a regular basis.
3	The teacher models and demonstrates proficiency in using the selected technology tool.	All criteria are met. An example is shown to students. A brief "tutorial" or explanation of how to use the application is provided for students. Support and problem-solving is available as needed. Alterations are made based on student needs.	Teacher meets 3 or more of the criteria on a regular basis.	Teacher meets 2 of the criteria on a regular basis.	Teacher meets 1 or none of the criteria on a regular basis.

*Evidence: Fidelity Checklist, Student Data

Assessment Capable Learners

Infographic | Learning Objectives and Practice Profile

Assessment Capable Learners

Who are Assessment Capable Learners?

Students who:

- know the learning target for the lesson
- can describe where they are in relation to the criteria
- use that information to select learning strategies to improve their work



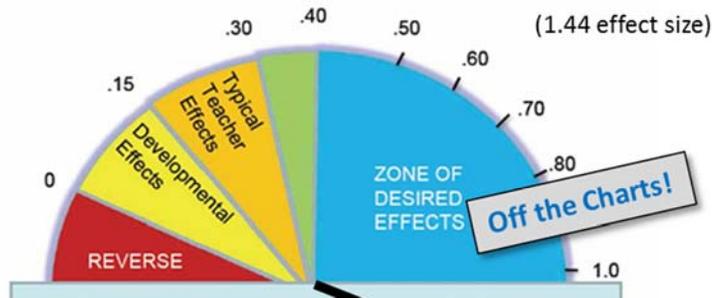
How can I bridge the gap?

Where am I now?

Where am I going?

Effect Size

Assessment Capable Learners



Benefits

When students self-assess regularly, track and share their progress, their confidence as learners grows. Their motivation to do well increases as does their achievement.

Stiggins & Chappuis 2010

Just beginning, I am not sure how to do this yet.



Getting better. I'm starting to understand what to do.



Bull's eye! I can do this well all the time!



Closing the Gap

- Students engage in reflective review (**revision**)
- Students can be encouraged to set questions and create solutions (**refine**)
- Students apply scoring criteria through peer assessment and self-assessment (**rework**)



Learning Objectives

- ◆ Recognize the benefits of developing assessment capable learners.
- ◆ Understand how to implement teaching strategies designed to develop assessment capable learners.
- ◆ Apply instructional strategies of assessment capable learners practice to all learning, regardless of grade level or content area.

Practice Profile

Missouri Collaborative Work Practice Profile

Foundations present in the implementation of each essential function: *Commitment to the success of all students and to improving the quality of instruction.*

Assessment Capable Learners Practice Profile				
Essential Function	Exemplary proficiency Ideal Implementation	Proficient	Close to Proficient <i>(Skill is emerging, but not yet to ideal proficiency. Coaching is recommended.)</i>	Far from Proficient <i>(Follow-up professional development and coaching is critical.)</i>
1 Educators teach students to determine, "Where am I going?"	When teaching students to develop learning goals, all of the following criteria occurs 80% of the time. Educator writes targets using student-friendly language. Educator models using "I can _____," or "I know _____" statements. Educator develops rubric with students. Educator analyzes student work with the students using exemplary and non-exemplary examples.	When teaching students to develop learning goals, all of the exemplary criteria occurs, but <80% of the time.	When teaching students to develop learning goals, some of exemplary criteria occur.	When teaching students to develop learning goals, none of exemplary criteria occur.
2 Educators teach students to determine, "Where am I now?"	When teaching student to self-evaluate learning progress, all of the following criteria occurs 80% of the time. Educator provides descriptive feedback. Educator asks students to assess their own progress by asking themselves some key questions about where they are in their learning. Educators instruct students to self-assess, justify and set goals.	When teaching student to self-evaluate learning progress, all of the exemplary criteria occurs, but <80% of the time.	When teaching student to self-evaluate learning progress, some of exemplary criteria occur.	When teaching student to self-evaluate learning progress, none of exemplary criteria occur.
3 Educators teach students to determine, "How can I close the gap?"	When teaching students to identify next learning steps, all of the following criteria occur 80% of the time. Educator assists the student in determining what might be some of the next instructional steps. Educator teaches the student to self-reflect, document, and share their learning.	When teaching students to identify next learning steps, all of the exemplary criteria occurs, but <80% of the time.	When teaching students to identify next learning steps, some of exemplary criteria occur.	When teaching students to identify next learning steps, none of exemplary criteria occur.



Learning Objectives

- ◆ Understand the role of feedback and its impact on student learning and achievement.
- ◆ Recognize the levels of feedback.
- ◆ Gain strategies for effective feedback implementation.
- ◆ See assessments are feedback about teaching.
- ◆ Consider the role of trust as a prerequisite to giving feedback to students and seeking feedback from students.

Practice Profile

Missouri Collaborative Work Practice Profile

Foundations present in the implementation of each essential component: *Commitment to the success of all students and to improving the quality of instruction.*

Feedback					
Essential Function		Exemplary proficiency Ideal Implementation	Proficient	Close to Proficient <i>(Skill is emerging, but not yet to ideal proficiency. Coaching is recommended.)</i>	Far from Proficient <i>(Follow-up professional development and coaching is critical.)</i>
1	Feedback is clear.	All of the following occur: The teacher feedback to students is clearly aligned with the learning goal and success criteria. The feedback consistently provides clues, hints or suggestions to students about what they can do to progress from their current learning status toward the desired learning goal. The feedback answers the three questions: Where am I going? How am I going? Where to next?	2 of the 3 criteria occur	1 of the 3 criteria occur	None of the criteria occur
2	Feedback provides for students to be active participants in their learning.	Extended feedback loops are used to support students' elaboration and to have students contribute to extended conversations. Classroom discourse is characterized by the consistent use of feedback/probes that encourage deeper/ more meaningful exploration of ideas.		There are occasional feedback loops, although they are short and often end abruptly and do not allow a full exploration of ideas and concepts.	The teacher asks questions from students, but discourse focuses on a statement of correct or incorrect rather than deeper/meaningful exploration of ideas.

*Evidence: Fidelity Checklist, Student Data

Reciprocal Teaching

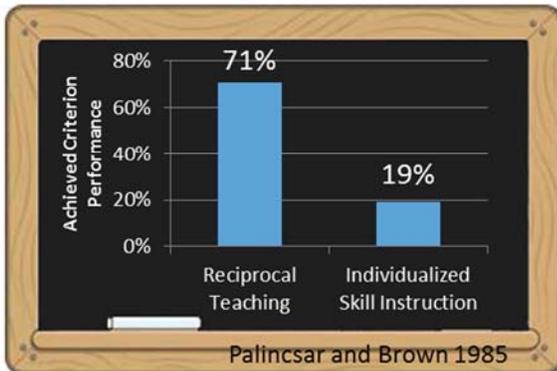
Infographic | Learning Objectives and Practice Profile

Reciprocal Teaching

Definition

Reciprocal teaching is an effective teaching/ learning practice and is defined as students summarizing, questioning, clarifying, and predicting; they take turns being the teacher.

Research



...teachers observed fewer behavior problems in their reciprocal teaching groups than in their control groups.

Palincsar and Brown 1985

Teachers saw increases in students' confidence and success, in their understanding and use of strategies, and in their enjoyment of literature.

Hashey, et al. 2003

Reciprocal Teaching in Practice

I thought the chapter would be about space travel since it was called *Shooting for the Stars*.

I think ...

Predict

Does this problem remind you of any other math problems you have solved in the past?

I would like to know what the phrase "naked eye" means?

What are the difficult words and ideas?

Clarify

Are there any words or terms you are unsure of?

Do you think the text is related to the title *Shooting for the Stars*?

Why Who What
When How

Question

What math operations are needed to solve this problem?

The text informs us that as time goes by we see stars differently

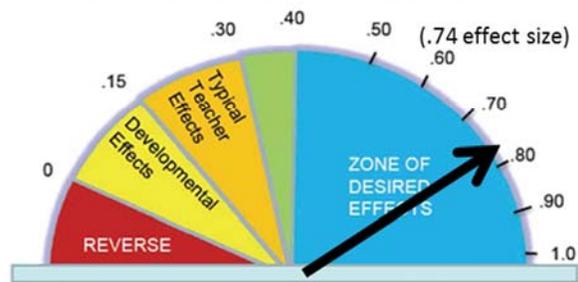
Theme Lesson
Moral

Summarize

Make a detailed plan on how to solve this problem.

Effect Size

Reciprocal Teaching
2 meta-analyses, 38 studies, Rank 9th





Learning Objectives

- ◆ Use reciprocal teaching terminology and strategies (predicting, clarifying, question generating, summarizing) to discuss text.
- ◆ Explore how the implementation of reciprocal teaching improves learning for all students.

Practice Profile

Missouri Collaborative Work Practice Profile

Foundations present in the implementation of each essential component: *Commitment to the success of all students and to improving the quality of instruction.*

Reciprocal Teaching					
Essential Function		Exemplary proficiency Ideal Implementation	Proficient	Close to Proficient <i>(Skill is emerging, but not yet to ideal proficiency. Coaching is recommended.)</i>	Far from Proficient <i>(Follow-up professional development and coaching is critical.)</i>
1	Teacher models, practices, and scaffolds the usage of the four components of reciprocal teaching.	Evidence of the modeling and/or use of all four components: predicting clarifying questioning summarizing	3 of the 4 criteria are met	2 of the 4 criteria are met	1 or less criteria are met
2	Before reading the teacher activates students' prior knowledge to anticipate learning.	All criteria are met. Activates students' prior knowledge (i.e., asks what students know or what the text reminds them of). Reviews all four strategies. Have students PREDICT what the reading will be about. Sets a purpose during reading (i.e., looking for words to CLARIFY or QUESTIONS to ask).	3 of the 4 criteria are met	2 of the 4 criteria are met	1 or less criteria are met
3	During reading the teacher engages students in clarifying, questioning, predicting, and summarizing the reading material.	All criteria are met. Coaches individual students in any of the four strategies. Has students do the following as they read: --CLARIFY words or ideas --Ask QUESTIONS about portions of the text --PREDICT what the next portion of the text is about --SUMMARIZE small portions or chunks of the text.	3 of the 5 criteria are met	2 of the 5 criteria are met	1 or less criteria are met
4	After reading the teacher engages students in learning reflections.	All criteria are met. Guides students as they: Return to PREDICTIONS and discuss them. CLARIFY words or ideas. Ask one another QUESTIONS. SUMMARIZE what was read. Reflect on strategy use and ask which strategies helped the most today.	3 of the 5 criteria are met	2 of the 5 criteria are met	1 or less criteria are met

*Evidence: Fidelity Checklist, Student Data

Spaced vs Massed Practice

Infographic | Learning Objectives and Practice Profile

Spaced Practice

Reviewing learning or practicing new skills with a time delay between trials.
(Distributed or Interleaving)

VS

Massed Practice

Reviewing learning or practicing new skills in long single sessions. (Cramming)



History



The spacing effect is one of the oldest findings in experimental Psychology. In the field of psychology the **spacing effect** refers to the finding that information, which is presented over spaced intervals is learned and retained more easily and more effectively.
Ebbinghaus, 1885

Why Does Spaced Practice Matter?

If information is repeated in a distributed fashion or **spaced over time**, it is learned more slowly but is retained for much longer.
Roediger III, H. L., & Pyc, M. A., 2012

8 8 8 8 8 8 8 8 8 8
x8 x6 x4 x2 x0 x9 x7 x5

How to Use Spaced Practice

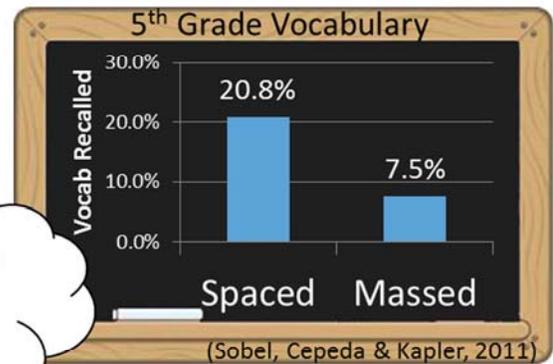
Repeat Information or skill with irrelevant activity between.

OR

Interleaved practice by having students study different examples of a concept spaced across time.



Research Results

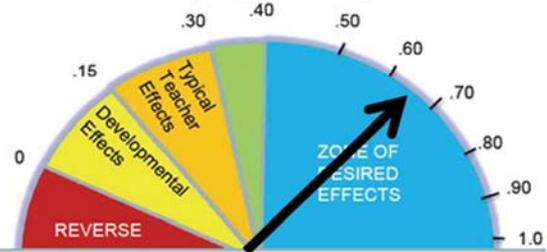


Students tested 5 weeks after last review

How Effective is Spaced Practice?

Spaced Practice

2 meta-analyses, 63 studies, Rank 13th





Learning Objectives

- ◆ Understanding the research and core components of spaced versus massed practice.
- ◆ Determining the types of concepts which best fit spaced practice.
- ◆ Determining the amount of space between repetition or practice of concepts.
- ◆ Applying spaced practice to identified concepts.
- ◆ Planning for classroom application.

Practice Profile

Missouri Collaborative Work Practice Profile

Foundations present in the implementation of each essential function: *Commitment to the success of all students and to improving the quality of instruction.*

Spaced vs Massed Practice Profile					
Essential Function		Exemplary proficiency Ideal Implementation	Proficient	Close to Proficient <i>(Skill is emerging, but not yet to ideal proficiency. Coaching is recommended.)</i>	Far from Proficient <i>(Follow-up professional development and coaching is critical.)</i>
1	Educator provides repeated instruction and distributes practice of a skill/concept over extended period of time.	Educator <u>plans for and provides</u> instruction and practice in a repeated fashion <u>consistently</u> spaced over time.		Educator <u>consistently plans</u> for instruction and practice in a repeated fashion consistently spaced over time.	Instruction and practice are <u>not</u> spaced over time.
2	Educator varies instruction, examples, models, and context of concept and/or skill allowing for distributed study.	Educator provides at least 3 varying repetitions for each concept.	Educator provides at least 2 varying repetitions for each concept.	Educator provides at least 1 varying repetition for each concept	No varying repetition for concepts/skills is provided.
3	Educator self-monitoring pacing of repeated instruction and intervals between practices.	Educator consistently plans for and tracks spacing of concepts/skills.		Educator <u>consistently plans</u> to track spacing of concepts/skills as indicated in lesson plans.	Educator does <u>not</u> track spacing of concepts/skills.

*Evidence: Fidelity Checklist, Student Data

School-Based Implementation Coaching

Infographic | Learning Objectives and Components

Coaching is a process!

How Coaching Works?

Because we value outcomes, **80%** or more of the time spent on performance support should be devoted to “coaching” practitioners how to do the intervention, better and better over time.

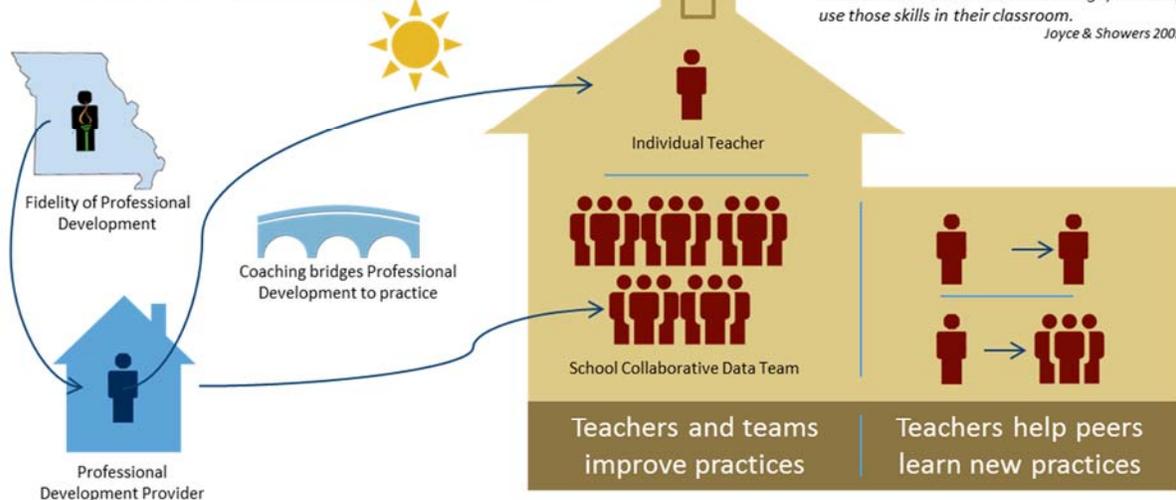
Karen Blase and Dean Fixsen, University of North Carolina - Chapel Hill

When is Coaching Needed?

1. When learning for the first time
2. When wanting to learn more
3. When trying to remember and/or apply
4. When things change
5. When something goes wrong

The Five Moments of Need©(Dr. Conrad Gottfredson 2010)

Who Needs Coaching?



Why Coaching is Important?

Methods of Professional Development

- Theory & Discussion**

I don't know how to use these skills in my classroom

0% transfer new skill into their practice after learning theory.
- Demonstration in Training**

I can demonstrate my new skills in training but I STILL don't know how to use this in my classroom

Though 30% demonstrate skills in training, 0% transfer new skills to practice after seeing it demonstrated in training.
- Practice & Feedback in Training**

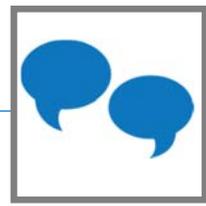
I can demonstrate my new skills and I am starting to understand how to use these in my classroom

5% will transfer new skills to classroom after learning theory, seeing it demonstrated, practicing and receiving corrective feedback during training.
- Coaching in Classroom**

I can use my new skills in my classroom!
I am a better educator with coaching!

After receiving coaching in the classroom, 90-95% were able to demonstrate knowledge, and skill, and use those skills in their classroom.

Joyce & Showers 2002



Learning Objectives

Understand the purposes of the school-based implementation coaching process by clarifying the following.

- ◆ The ability to match expertise with school-based implementation coaching needs.
- ◆ The essential elements of the school-based implementation coach.
- ◆ The role and responsibilities of the school-based implementation coach.
- ◆ The role of the school-based implementation coach in supporting fidelity.

Learning Package Components



School-Based Implementation Coaching

Practice Profile

Missouri Collaborative Work Practice Profile

Foundations present in the implementation of each essential function: *Commitment to the success of all students and to improving the quality of instruction.*

School-based Implementation Coaching		
Essential Function	Exemplary Ideal Implementation <i>(All items are in place.)</i>	Proficient
1	Developing and maintaining coaching relationships.	<p>At the beginning of the coaching relationship, the educator-coach</p> <ul style="list-style-type: none"> Describes the coaching process and expectations for the educator-coach and coached-educator Explains that confidentiality will be maintained Poses questions and listens to the coached-educator describe current teaching successes and challenges
2	Facilitating the improvement process.	<p>The educator-coach supports the coached-educator to learn and implement new teaching/ learning practices by:</p> <ul style="list-style-type: none"> Attaining verbal commitment from the coached-educator to engage in the coaching relationship and improving implementation of teaching/learning practices. Addressing coached-educator feelings of being overwhelmed with the implementation process by breaking down the steps or methods of implementation into manageable units. Giving rationale for the importance of implementing the teaching/learning practice.
3	Communicating in a timely and responsive manner.	<p>The educator-coach</p> <ul style="list-style-type: none"> Uses a variety of methods (e.g. email, phone, in person, and video conference.) for checking in on the status of practice implementation with the educator(s). Is responsive to information needs and questions in a timely manner, explicitly and mutually agreed upon with the coached-educator (e.g. Both parties decide that responding within mutually determined number of days is most helpful and feasible.) Requests and is responsive to feedback from the coach-educator about the coaching experience.
4	Engaging in solution-driven dialogue.	<p>The educator-coach</p> <ul style="list-style-type: none"> Facilitates ongoing coaching conversations that build on the strengths of the coached-educator and is solution-driven. Provides feedback based on direct observations Poses reflective question on “what is working” and “what is not working.” Reviews data with the coach-educator and uses data to design next steps and frame recommendations.

*Evidence: Fidelity Checklist, Student Data



Close to Proficient <i>(Skill is emerging, but not yet to ideal proficiency.)</i>	Far from Proficient <i>(Follow-up professional development is critical.)</i>
<p>At the beginning of the coaching relationship, the educator-coach Describes the coaching process and expectations for the educator-coach and coached-educator Poses questions and without listening to the coached-educator describe current teaching successes and challenges Confidentiality is not addressed.</p>	<p>Coaches do not take time to develop positive, professional relationships with the building educators as they take on the functions of school-based implementation coach.</p>
<p>The educator-coach supports the coached-educator at a moderate to minimal level. Addressing coached-educator feelings of being overwhelmed with the implementation process by creating an awareness of the steps or methods of implementation. Stating the importance of implementing the teaching/learning practice without providing rationale explaining why. Assumes that there is a commitment from the coached-educator to engage in the coaching relationship and improve implementation of teaching/learning practices.</p>	<p>The educator-coach initiates a coaching relationship but does not follow-through.</p>
<p>The educator-coach relies on only one form of communication for checking in on the status of practice implementation with the educator(s). is inconsistent and unpredictable in responding and providing feedback to coached educators' information needs and questions Coaching conversations and/or feedback are one-sided and directive, do not build on the strengths of the coached-educator and are not solution-driven.</p>	<p>The educator-coach overlooks the need for consistent and ongoing communication and/or feedback with coached-educators.</p>
<p>The educator-coach Without regard for strengths, focuses too often on the coached-educator's weaknesses or the ways in which implementation was poor or inaccurate. Provides feedback without or with minimal direct observation. Does not engage in reflective questioning. Reviews data without using it to inform next steps.</p>	<p>The educator-coach is negative and/or does not actively engage with the coached-educator.</p>

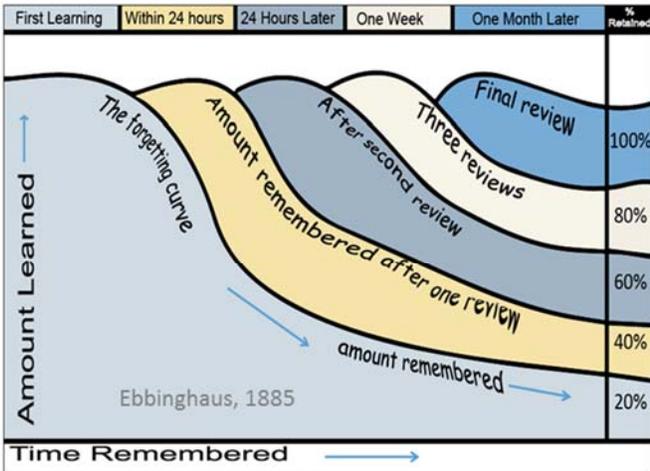


The **coaching relationship** provides important supports for bridging professional development to practice. Coaching conversations can provide timely, focused, and contextual grounding for improving implementation of effective teaching/ learning practices in the classroom context and ultimately result in improved student achievement. Coaching involves a reciprocal relationship between the educator-coach and the coached-educator.

Using Technology to Enhance Professional Learning

When is Technology Useful/Helpful?

When We Tend to Forget



During the Urgency of Needing to Know

The 5 moments of Need

LEARNING Something **NEW**

Needing to know **MORE** of something

Trying to **REMEMBER** or apply

When things Change

When things go **WRONG**

Gottfredson & Mosher, 2010

Self-Paced Tutorials

Podcast

Video Streaming

Coaching/Mentoring

Threaded Discussion

Simulation

Chat

Virtual classroom

Webinar

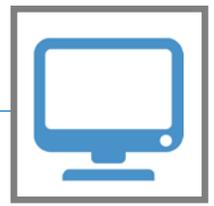
Tools that support interactive learning

Tools that support independent self-guided learning

How can technology support educators?

<p>Knowledge and Skills</p>	<p>When they need to re-learn, learn more or learn now.</p>	<p>It's easy to forget some of the steps or suggestions mentioned in the workshop. I need a refresher.</p>
<p>Self-Efficacy</p>	<p>When they want to share and read "real" examples of "what works" and "how they make it work"</p>	<p>It would be helpful to hear how other teachers have used the teaching practice or strategy.</p>
<p>Pedagogy</p>	<p>When they need to see effective teaching and learning examples.</p>	<p>It would be helpful to see an experienced teacher using the practice or strategy.</p>
<p>Ongoing Professional Learning</p>	<p>When they want to further their learning in a time efficient and focused manner.</p>	<p>There is so much information available online. How do I know where to begin and how to focus?</p>





Technology

The use of technology to support bridging professional development to practice is an aspect of the Missouri SPDG. The use of technology is supported through specific professional development which was recently provided through a 2-day statewide shared learning event. Additionally, the MO SPDG has a designated Technology Implementation Specialist who works across the state supporting the use of technology to enhance professional development. Lastly, the project is supported through two websites.

MO Edu-SAIL (Systems & Instruction for Learning)

www.moedu-sail.org

Edu-SAIL: Systems and Instruction for Learning is a platform for bridging professional development to practice by enhancing educator professional development at state, regional, and local levels.

[Learn More](#)

- High Quality PD
- PD to Practice
- Resource Library
- Data & Evaluation

MO SPDG Data Portal

www.mospdgdata.org

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Missouri SPDG Data Portal

MO EDU-SAIL



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