Turnaround Plan
Whitney Young Elementary

Navigation of Document

8 Principles of School Improvement Planning

Principle #1	**Elevate school improvement as an urgent priority at every level of the system and**	*If everything's a priority, nothing is.*
Principle #2	**Make decisions based on what will best serve each and every student with the expectation that all students can and will master the knowledge and skills necessary for success in college, career, and civic life. Challenge and change existing structures or norms that perpetuate low performance or stymie improvement.**	*Put students at the center so that every student succeeds*
Principle #3	**Engage early, regularly, and authentically with stakeholders and partners so improvement is done with and not to the school, families, and the community.**	*If you want to go far, go together.*
Principle #4	**Select at each level the strategy that best matches the context at hand—from LEAs and schools designing evidence-based improvement plans to SEAs exercising the most appropriate state-level authority to intervene in non-exiting schools.**	*One size does not fit all.*
Principle #5	**Establish clear expectations and report progress on a sequence of ambitious yet achievable short- and long-term school improvement benchmarks that focus on both equity and excellence.**	*What gets measured gets done.*
Principle #6	**Implement improvement plans rigorously and with fidelity, and, since everything will not go perfectly, gather actionable data and information during implementation; evaluate efforts and monitor evidence to learn what is working, for whom, and under what circumstances; and continuously improve over time.**	*Ideas are only as good as they are implemented.*
Principle #7	**Dedicate sufficient resources (time, staff, funding); align them to advance the system's goals; use them efficiently by establishing clear roles and responsibilities at all levels of the system; and hold partners accountable for results.**	*Put your money where your mouth is.*
Principle #8	*Plan from the beginning how to sustain successful school improvement efforts financially, politically, and by ensuring the school and LEA are prepared to continue making progress.*	*Don't be a flash in the pan*

BUILDING AN EFFECTIVE TURNAROUND PLAN

Preparing to Write an Improvement Plan

Build a responsive and effective **team** focused on continuous improvement

Familiarize the team with the **Key Core Work Processes**

Have team members **survey the Diagnostic Review Report**

Identify one Improvement Priority from the Diagnostic Review Report on which to focus

Essential Question 1:
What do our improvement priorities specifically tell us to do?

Improvement Priority Deconstruction

Identify the **concepts** that are the basis of the standard

Identify the **actions** required

Understand the process will most likely require you to break-down the actions into sub-components in order to fully address the priority.

Essential Question 2:
How do we know what school practices, processes, and conditions lead to improved student achievement?

Key Core Work Processes Needs Assessment

Examine KCWPs

Identify the suitable KCWP(s) that will strategically address the IP

Reference the **Needs Assessment tool** to guide:

- defining how the school's work will be accomplished
- identify the processes and resources necessary
- support delivery of programs and services
- ensure purposeful continuous improvement of the process

The team decides on strategies to systematically address the process, practice, or condition needing change.

Complete for each I.P.

Evidence-Based Practices (EBP)

1. Review practice - is it effective? Does it meet the level required by ESSA?
2. Evaluate - Use tools such as the Hexagon to rate possible practices/ new innovations to find best fit for needs
3. Complete questions/ narrative - see the Turnaround Plan

Circle of Influence and Barrier Identification

Brainstorm obstacles that will impede the work from the IP

Determine the **level** of influence/control of each obstacle

Obstacles that you can influence/control, complete a **root cause analysis** (e.g. 5 Whys)

Determine solutions for obstacles to incorporate into the process

Essential Question 3:
What are the barriers for I.P. implementation and what are the root causes?

Activities as Action Steps

Determine activities that will be used to deploy the chosen strategy

Activities - Turnaround Plan Template

- *serve the process, practice, or condition*
- *one per I.P. must be evidence-based (EBP)*
- *project necessary funding (SIF Grant Application)*
- *include methods of monitoring and measurement*

Essential Question 4:
What steps are needed to support the process/practice/condition?
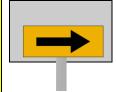
Turnaround Plan Overview and Implementation Process

Turnaround Plan (3 year strategic plan) with FOCUS on the Diagnostic Review Improvement Priorities.

➡️

First 45 Day Plan

These are the immediate next steps for school improvement derived from the overall three year turnaround plan.

➡️

Check Point 1
A specific process for CSI school leadership teams along with AIS and KDE personnel to discuss implementation and impact of 45 Day plan and quarterly report data. Develop next steps for the next 45 days

➡️

Second 45 Day Plan

These are the immediate next steps for school improvement derived from the overall three year turnaround plan.

Check Point 2
A specific process for CSI school leadership teams along with AIS and KDE personnel to discuss implementation and impact of 45 Day plan and quarterly report data. Develop next steps for the next 45 days

➡️

Third 45 Day Plan

These are the immediate next steps for school improvement derived from the overall three year turnaround plan.
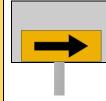
➡️

Check Point 3
A specific process for CSI school leadership teams along with AIS and KDE personnel to discuss implementation and impact of 45 Day plan and quarterly report data. Develop next steps for the next 45 days
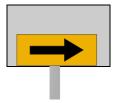
➡️

Fourth 45 Day Plan
These are the immediate next steps for school improvement derived from the overall three year turnaround plan.

Annual Analysis of the CSI School's Turnaround Planning Process
A self-assessment of the CSI school's ability to develop, implement, monitor, and evaluate the turnaround plan.

School Name
Whitney Young Elementary

Vision
(Please record the school's mission statement in the box below.)

Our vision at WYES is to consistently collaborate to establish an emerging and rigorous environment which will unlock the full potential of every learner to achieve growth toward mastery.

Mission
(Please record the school's vision statement in the box below.)

Our mission at WYES is to cultivate high academic expectations for learners to achieve mastery and become globally competent citizens.

Stakeholder Involvement
(Who is responsible for the development, implementation, monitoring, and evaluation of this plan? Please include job role(s). This should be the school's turnaround team.)

Erica Lawrence, principal	Arivia Parks, assistant principal
Katie Blieden, AIC	Kasey Ellyson, reading interventionist
Elizabeth Iredale, math interventionist	Marcie Smith, 3rd grade teacher
Victoria Bickett, 5th grade teacher	Kim Willhoite, education recovery leader
Mary Jo Wimsatt, magnet coordinator	

Accountability Area	Goals These are the aim statements the school will be reaching 3 years from now.	Objectives These are aim statements the school will be reaching this school year.
Proficiency	Whitney Young Elementary will increase the reading percentage of proficient/distinguished students from 18.7% to 27.7%, as measured by 2023 KPREP. Whitney Young Elementary will increase the mathematics percentage of proficient/distinguished students from 20.2% to 29.2%, as measured by 2023 KPREP.	By the end of the 2019-2020 school year, our students will reach a Proficient/Distinguished score of 21.7% Reading. By the end of the 2019-2020 school year, our students will reach a Proficient/Distinguished score 23.2% in Mathematics.
Separate Academic Indicator	Whitney Young Elementary will increase the percentage of proficient /distinguished students in Science from 9.1% to 18.1%, from 14.3% to 23.3% in Social Studies, and from 17.9% to 26.9% in Writing as measured by 2023 KPREP.	By the end of the 2019-2020 school year, our students will reach a Proficient/Distinguished score of 12.1% in science. By the end of the 2019-2020 school year, our students will reach a Proficient/Distinguished score of 17.3% in social studies. By the end of the 2019-2020 school year, our students will reach a Proficient/Distinguished score of 20.9% in writing.
Growth	By 2023, Whitney Young Elementary will increase in the area of growth. All 3-5 students will show growth towards grade level benchmarks on the MAP assessment in reading and math. 30% of students will reach proficient or advanced benchmarks as measured by the MAP projected proficiency report in reading and math by 2023.	By the end of the 2019-2020 school year, 60% of students in grades 3-5 will meet the expected growth projection as measured by MAP.

Accountability Area	Goals These are the aim statements the school will be reaching 3 years from now.	Objectives These are aim statements the school will be reaching this school year.
Transition Readiness	By May of 2020, all Whitney Young Elementary 5th grade students will successfully defend their Backpack of Success and be able to articulate how they know they are prepared for middle school.	By the end of the 2019-2020 school year, all 5th grade students will defend their preparedness for middle school.
Graduation Rate	N/A	
GAP	African American students at Whitney Young Elementary in grades 3-5 will achieve proficiency in math (20.4%) and reading (21%) by 2023 on KPREP.	By the end of the 2019-2020 school year, 15% of African American students in grades 3-5 will meet proficiency in math and 14.3% will meet proficiency in reading as evidenced on KPREP.
Other	N/A	

IMPROVEMENT PRIORITY #1	IMPROVEMENT PRIORITY #2	IMPROVEMENT PRIORITY #3
Create, implement, monitor, & evaluate a system that involves all stakeholders in a continuous improvement process using multiple measures to identify, address, & monitor student learning needs & effective instructional practices within a rigorous curriculum. (Standard 1.3)	Establish, communicate, implement, & monitor a formal process for analyzing student performance data to adjust instruction & to ensure quality instructional practices are used to meet individual learner needs. This process should include 1) schoolwide monitoring schedule, 2) data analysis tools, 3) a communication plan that focuses on informing all stakeholders about individual learners' needs and progress. (Standard 2.7)	
Improvement Priority Deconstruction (What does this statement specifically say we must do or change? Use school friendly terms.)	**Improvement Priority Deconstruction** (What does this statement specifically say we must do or change? Use school friendly terms.)	**Improvement Priority Deconstruction** (What does this statement specifically say we must do or change? Use school friendly terms.)
Create a process for continuous improvement (implement, monitor & evaluate) moving toward student proficiency within a rigorous curriculum.	Use a PLC process to analyze student data/work to make adjustments to the instruction and to meet individual student needs.	

Strategies to Address Improvement Priorities

Identify the strategy your school will use to address the identified improvement priority. In the blank box under the strategy you select, write a brief description of the context of how this strategy will be deployed.
(The link to the KCWP can be found below this box.)

https://education.ky.gov/school/stratclsgap/Pages/default.aspx

_X___KCWP 1: Design and Deploy Standards	____KCWP 1: Design and Deploy Standards	____KCWP 1: Design and Deploy Standards
Teaches will receive a new math curriculum and engage in updating the JCPS reading curriculum using existing school resources. Over the 3 years, all content area curriculum will be updated/adopted to ensure rigorous alignment to the standards.		
_X___KCWP 2: Design and Deliver Instruction	____KCWP 2: Design and Deliver Instruction	____KCWP 2: Design and Deliver Instruction
Teachers will design lesson units and curriculum to ensure equity for all students. Tier 1 instruction will be a focus to increase overall student proficiency.		
____KCWP 3: Design and Deliver Assessment Literacy	_X___KCWP 3: Design and Deliver Assessment Literacy	____KCWP 3: Design and Deliver Assessment Literacy
	Common formative assessments will be written to the level of the standard to use for evaluation of student performance.	
___ KCWP 4: Review, Analyze, and Apply Data	_X__ KCWP 4: Review, Analyze, and Apply Data	___ KCWP 4: Review, Analyze, and Apply Data
	The common formative assessments will be reviewed weekly in a PLC process to determine instructional next steps for students.	
____KCWP 5: Design, Align, and Deliver Support	____KCWP 5: Design, Align, and Deliver Support	____KCWP 5: Design, Align, and Deliver Support
____KCWP 6:Establish Learning Culture & Environment	____KCWP 6:Establish Learning Culture & Environment	____KCWP 6:Establish Learning Culture & Environment

Year One Activities

Based upon the strategies selected from all Improvement Priorities above, determine the specific activities to be deployed in the school to address a process, practice, or condition during the first year of the school turnaround experience.

Activity Name and Description (Include EBP and I.P. denotation)	Funding	KCWP Connection	Monitoring/ Measurement
Create, communicate, implement PLCs with fidelity in mathematics. PLC training will be provided by Solution Tree through embedded coaching and an online PD database (Global PD Suite). Eight extended PLC meetings will be held throughout the school year after school. Teacher stipends will be paid for an hour for each meeting. EBP: PLC, PD IP #1 and 2	Embedded coaching: $6,500 Global PD Suite: $2,800 Teacher stipends for extended PLC meetings $12,600 (8 mtgs)	KCWP #3, 4	● Establish a yearly PLC calendar. ● Teachers will engage in PLC training prior to PLCs beginning. ● Leadership staff will provide feedback to teachers on their PLC implementation using DuFour's resources/training ● DuFour monitoring tool ● PLC self-assessment tool ● PLC agendas and minutes ● 45 day plan ● Admin team trained in Shipley to create a strong system for PLCs ● Group students based on assessments
Develop master instructional schedule for 2020-21 school year IP #1	none	KCWP #5	● Master schedule reviewed with the Instructional Leadership Team for approval ● Master schedule shared with teachers
Bridges Mathematics curriculum adoption, training, and implementation EBP: Bridges Math IP #1	Math Curriculum and Training $27,060.30	KCWP #1	● Professional development on Bridges implementation ● Weekly lesson plan review ● PLC agendas and minutes ● Classroom walkthroughs ● Weekly monitoring of student achievement data
Align JCPS ELA units/curriculum with Journeys reading program literature. IP #1	none	KCWP #1	● Weekly lesson plan review ● Classroom walkthroughs
Implement Being a Writer Curriculum IP #1	none	KCWP #1	● Weekly lesson plan review ● Classroom walkthroughs

Year One Activities

Based upon the strategies selected from all Improvement Priorities above, determine the specific activities to be deployed in the school to address a process, practice, or condition during the first year of the school turnaround experience.

Activity Name and Description (Include EBP and I.P. denotation)	Funding	KCWP Connection	Monitoring/ Measurement
Integrate International Baccalaureate (IB) transdisciplinary themes into science and social studies units of study IP #1	none	KCWP #1	● Create and monitor progress of the International Baccalaureate (IB) integration within the Science and social studies units ● Weekly lesson plan review ● Classroom walkthroughs ● IB assessment data analysis
Assign peer mentors/buddies to teachers. The first year the teams will work on building relationships only. (More in year 2.) EBP: Coaching IP #2	none	KCWP #6	● Assign teacher partners ● Team building activities
Implement Shipley's System Approach to ensure continuous improvement and school improvement planning for student success through a PDSA process. EBP: Shipley IP #1	School Funded $124.75	KCWP #5	● Admin/instructional leadership team meeting agendas and minutes ● School improvement PDSA plans ● PLC system (Created and monitored) ● 45 day check
School visits to an exemplary International Baccalaureate (IB) school to evaluate best practices in curriculum and instruction. EBP: PD IP #1	$7,206 (team of 5) Includes all travel and sub costs	KCWP #2	● Monitor IB best practices strategies on lesson plans ● Classroom walkthroughs
International Baccalaureate (IB) in-person 2-day training (summer 2020) 'Making the Primary Years Programme Happen' to explore the fundamentals of the IB program and implementation with the school's curriculum from IB trainers. EBP: PD IP #1	School Funded $19,250	KCWP #1	● Monitor lesson plans ● Classroom Walkthroughs ● Provide feedback through follow up coaching

Year One Activities

Based upon the strategies selected from all Improvement Priorities above, determine the specific activities to be deployed in the school to address a process, practice, or condition during the first year of the school turnaround experience.

Activity Name and Description (Include EBP and I.P. denotation)	Funding	KCWP Connection	Monitoring/ Measurement
Kagan Year 1 Training and Coaching Intense focus and integration of 10 Kagan strategies for 2020-2021 school year from Kagan trainers EBP: Kagan IP #1	2 day training $8,922.65 Kagan coaching during year - $5,748	KCWP #2	● Monitored by PLC process and explicit integration in lesson plans ● Admin walk through data ● Feedback and reflection from Kagan coaching during school year
RRCNA Conference Teachers will attend a Guided Reading national conference EBP: Guided Reading IP #1, 2	$6,215.36 (4 teachers cost for travel and registration fees)	KCWP #2	● Guided Reading lesson plans ● Guided Reading walk throughs
Professional Learning Communities at Work Institute Attend the institute with a teacher and admin leadership team. EBP: PLC, PD IP #2	$17,115.20 (cost for a team of 8 to attend)	KCWP #3, 4	● Attendee attendance at the conference ● PLC meetings and agendas ● 45 day check ● Leadership staff will provide feedback to teachers on their PLC implementation using DuFour's resources/training ● DuFour monitoring tool ● PLC self-assessment tool
Teachers will engage in peer observations and feedback using Rutherford's Teaching Studies teaching tool. EBP: Coaching IP #1 and 2	$2,900 subs for teachers	KCWP #6	● Peer Mentors/Buddies will coordinate and facilitate peer observations of each other that include coaching and feedback. ● Peer mentor observation schedule
Literacy Footprints Texts Purchase Guided Reading leveled texts to implement Guided Reading in the classroom. EBP: Guided Reading IP #2	$6,825	KCWP #2	● Guided Reading lesson plans ● Guided Reading walk throughs ● Guided Reading running records

Year Two Activities

Based upon the strategies selected from all Improvement Priorities above, determine the specific activities to be deployed in the school to address a process, practice, or condition during the first year of the school turnaround experience.

Activity Name and Description (Include EBP and I.P. denotation)	Funding	KCWP Connection	Monitoring/ Measurement
Monitor PLCs with fidelity. PLC training will be provided by Solution Tree through an online PD database (Global PD Suite), content-specific PD, and interactive web-conference coaching. EBP: PLC IP #1 and 2	Global PD Suite: $2,800 Content- specific PD: $19,500 Interactive web-conference coaching: $12,000	KCWP #4	• Bridges instructional feedback and coaching • Collaborative review of Scope & Sequence • Review of math lesson plans • Weekly analysis of learner progress within PLC • Review of PLC agenda and minutes • Analysis of learner progress through formative and MAP assessments. • MTSS process utilized for learners not making adequate progress • Monitor for fidelity-DuFour tool • Review annual student achievement data from implementation year 1 (MATH specifically) • Add reading to the PLC yearly schedule • 45 day check
Consistently monitor reading instruction and student achievement through the PLC process EBP: PLCs IP #1 and 2	none	KCWP #3, 4	• Literacy instructional feedback and coaching • Guided Reading instructional feedback and coaching • Review of literacy lesson plans • Review of Guided Reading Template • Analysis of Running Records • Analysis of learner progress within PLC • Grouping of students based on assessments
Integrate International Baccalaureate (IB) transdisciplinary themes in remaining content areas (ELA and math) IP #1	none	KCWP #2	• PLT and International Baccalaureate (IB) Coordinator will review and update the IB feedback and coaching tool to measure and monitor IB implementation in the classroom. • IB Coordinator and the Leadership team will collect and analyze the data by using the IB feedback and coaching tool, then create any necessary revisions. • Monitor lesson plans

Year Two Activities

Based upon the strategies selected from all Improvement Priorities above, determine the specific activities to be deployed in the school to address a process, practice, or condition during the first year of the school turnaround experience.

Activity Name and Description (Include EBP and I.P. denotation)	Funding	KCWP Connection	Monitoring/ Measurement
Assigned peer mentors (year 1) will provide peer to peer feedback through observations [Rutherford's Teaching Studies] EBP: Coaching IP #1 and 2	$2,900 subs for teachers	KCWP #6	● Peer Mentors/Buddies will coordinate and facilitate peer observations of each other that include coaching and feedback. ● Peer mentor observation schedule
Kagan Year 2 Continued focus and integration of strategies from year 1, plus new strategies and deeper implementation for year 2 from Kagan trainers. EBP: Kagan IP $1	Days 3,4,5 training ~ $11,000 2 Day Kagan coaching during year ~ $5,748	KCWP #2	● Monitored by PLC process and explicit integration in lesson plans ● Admin walk through data ● Feedback and reflection from Kagan coaching during school year ● Lesson plans
Bridges Mathematics and ELA (reading and writing) curriculum implementation with fidelity EBP: Bridges Math IP #1, 2	none	KCWP #1	● Fidelity implementation checks ● Weekly lesson plan review ● PLC agendas and minutes ● Classroom walkthroughs ● Weekly monitoring of student achievement data (PLC agendas and minutes)
Use Shipley's System Approach to ensure continuous improvement and school improvement planning for student success through a PDSA process. EBP: Shipley IP #1	none	KCWP #5	● Admin/instructional leadership team meeting agendas and minutes ● School improvement PDSA plans ● PLC system (Created and monitored) ● 45 day check

Year Two Activities

Based upon the strategies selected from all Improvement Priorities above, determine the specific activities to be deployed in the school to address a process, practice, or condition during the first year of the school turnaround experience.

RRCNA Conference Teachers will attend a Guided Reading national conference EBP: Guided Reading IP #1, 2	$6,215.36 (4 teachers cost for travel and registration fees)	KCWP #2	● Guided Reading lesson plans ● Guided Reading walk throughs
Guided Reading Professional Texts and Resource Purchase the Next Step Guided Reading in Action Text (use in a book study) and The Next Step Forward in Word Study and Phonics Resource for teacher use in the classroom to grow their professional knowledge and provide additional teacher resources for use in instruction. EBP: Guided Reading IP #1	$854.13	KCWP #2	● Book study meeting agenda/minutes ● Guided Reading lesson plans ● Guided Reading walk throughs

Year Three Activities

Based upon the strategies selected from all Improvement Priorities above, determine the specific activities to be deployed in the school to address a process, practice, or condition during the first year of the school turnaround experience.

Activity Name and Description (Include EBP and I.P. denotation)	Funding	KCWP Connection	Monitoring/ Measurement
Monitor student achievement and quality of instructional practices through PLCs. EBP: PLC IP #1 and 2	none	KCWP #4	● Learner progress measured through formative and MAP assessments. ● MTSS process utilized for learners not making adequate progress. ● Every content area will be monitored in weekly PLCs ● Review annual student achievement data from implementation year 2 (Math and Reading) ● Continue monitoring fidelity
Consistently monitor all content areas (math, reading, writing, science, and social studies) instruction and student achievement through the PLC process. EBP: PLCs IP #1 and 2	none	KCWP #3, 4	● Guided Reading coaching and feedback ● Review of annual reading student achievement data ● Literacy standard instruction coaching and feedback ● Analysis of learner progress through Running Records and formative assessments. ● Grouping of students based on assessments
Kagan Year 3 Implementation Continued coaching and focus on new Kagan strategies not implemented from years 1 & 2 from Kagan trainers. EBP: Kagan IP #1	none	KCWP #2	● Monitored by PLC process and explicit integration in lesson plans ● Admin walk through data
Bridges Mathematics, ELA (reading and writing), science, and social studies curriculum implementation with fidelity EBP: Bridges Math IP #1, 2	none	KCWP #1	● Fidelity implementation checks ● Weekly lesson plan review ● PLC agendas and minutes ● Classroom walkthroughs ● Weekly monitoring of student achievement data (PLC agendas and minutes) ● Unit plan

Year Three Activities

Based upon the strategies selected from all Improvement Priorities above, determine the specific activities to be deployed in the school to address a process, practice, or condition during the first year of the school turnaround experience.

Activity Name and Description (Include EBP and I.P. denotation)	Funding	KCWP Connection	Monitoring/ Measurement
Review International Baccalaureate (IB) integrated units of study created in Year 1 and 2. IP #1	none	KCWP #1, 2	• International Baccalaureate (IB) units of study • IB assessments
Assigned peer mentors (year 1) will continue peer to peer feedback through observations [Rutherford's Teaching Studies] EBP: Coaching IP #1 and 2	School Funded $2,900 subs for teachers	KCWP #6	• Peer Mentors/Buddies will coordinate and facilitate peer observations of each other that include coaching and feedback. • Peer mentor observation schedule
Continue to use Shipley's System Approach to ensure continuous improvement and school improvement planning for student success through a PDSA process. EBP: Shipley IP #1	none	KCWP #5	• Admin/instructional leadership team meeting agendas and minutes • School improvement PDSA plans • PLC system (Created and monitored) • 45 day check

Evidence Based Practice #1: PLCs

Are there research data available to demonstrate the effectiveness (e.g. randomized trials, quasi-experimental designs) of the innovation? If yes, provide citations or links to reports or publications.	To summarize the findings across the reviewed literature in terms of our two initial research questions: (1) participating in learning communities impacts teaching practices as teachers become more student centered. In addition, teaching culture is improved because the learning communities increase collaboration, a focus on student learning, teacher authority or empowerment, and continuous learning; (2) when teachers participate in a learning community, students benefit as well, as indicated by improved achievement scores over time. Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. Teaching and Teacher Education (24), 80-91.
What is the strength of the evidence? Under what conditions was the evidence developed?	10 American studies and one English study on the impact of PLCs on teaching practices and student learning. The collective results of these studies suggest that well-developed PLCs have positive impact on both teaching practices and student achievement.
What outcomes are expected when the innovation is implemented as intended? How much of a change can be expected?	Participation in learning communities impacts teaching practices as teachers become more student centered. In addition, teaching culture is improved because the learning communities increase collaboration, a focus on student learning, teacher authority or empowerment, and continuous learning. When teachers participate in a learning community, students benefit as well, as indicated by improved achievement scores over time.
If research data are not available, are there evaluation data to indicate effectiveness (e.g. pre/post data, testing results, action research)? If yes, provide citations or links to evaluation reports.	N/A
Is there practice-based evidence or community-defined evidence to indicate effectiveness? If yes, provide citations or links.	As a part of the change process teachers worked collaboratively to develop a shared school mission around four guiding values that included integrity, respect, discipline, and excellence (p. 133). The author concluded that this led to the development of stronger instructional norms and made the teachers receptive to working with a curriculum facilitator in the areas of changing practices for guided reading, writing, and self-selected reading. Andrews and Lewis (2002) indicated that teachers who participated in a learning community known as Innovative Design for Enhancing Achievement in Schools (IDEAS) reported changes in their practices. The following quote is representative, "I find that my teaching has improved, I find that I understand more about what I'm doing, why I'm doing things, and I find that's been an improvement" (p. 246). Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. Teaching and Teacher Education (24), 80-91.

Evidence Based Practice #1: PLCs

Is there a well-developed theory of change or logic model that demonstrates how the innovation is expected to contribute to short term and long-term outcomes?	At its core, the concept of PLC rests on the premise of improving student learning by improving teaching practice.

Change in the professional culture of a school is a significant finding because it demonstrates that establishing a PLC contributes to a fundamental shift in the habits of mind that teachers bring to their daily work in the classroom.

To summarize the findings across the reviewed literature in terms of our two initial research questions: (1) participating in learning communities impacts teaching practices as teachers become more student centered. In addition, teaching culture is improved because the learning communities increase collaboration, a focus on student learning, teacher authority or empowerment, and continuous learning; (2) when teachers participate in a learning community, students benefit as well, as indicated by improved achievement scores over time.

Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. Teaching and Teacher Education (24), 80-91. |
| Do the studies (research and/or evaluation) provide data specific to the setting in which it will be implemented (e.g., has the innovation been researched or evaluated in a similar context?) If yes, provide citations or links to evaluation reports. | 10 empirical studies of the work of teachers in learning communities. In addition, we decided to include one large multi-site research report commissioned and published by the General Teaching Council of England

These researchers focused on elementary, middle, and high schools. There were various schools included in the studies that vary in demographics and location.

Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. Teaching and Teacher Education (24), 80-91. |
| Do the studies (research and/or evaluation) provide data specific to effectiveness for culturally and linguistically specific populations? If yes, provide citations or links specific to effectiveness for families or communities from diverse cultural groups? | Hollins et al. (2004) stressed the importance of a facilitator who helped teachers maintain a focus on the goal of improving literacy for African-American students during all group meetings. Additionally, the facilitator worked to ensure that the efforts of their collaborations were always rooted in improving test score and other measures of student achievement.

Phillips concluded that the teachers "knew their students' population well, and they deliberately created culturally relevant programs to make learning more meaningful" (p. 258). In the long run, the data across these studies indicated that a key element of successful PLCs is their pervasive attention to meeting the learning needs of their students.

Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. Teaching and Teacher Education (24), 80-91. |

Evidence Based Practice #2: Bridges

Are there research data available to demonstrate the effectiveness (e.g. randomized trials, quasi-experimental designs) of the innovation? If yes, provide citations or links to reports or publications.	The results of this study indicate that students who receive instruction that includes Bridges significantly outperform students who receive instruction without Bridges. Taken with the positive evaluation of the program by teachers, these findings suggest that Bridges is an effective tool for improving student math skills. Students who receive instruction with Bridges achieved significantly higher assessment scores than students whose instruction does not include Bridges. Gains were both statistically significant and educationally meaningful. Fourth grade students in the treatment group achieved significantly higher scores on the state math assessment than fourth grade students in the control group. The results show an effect size of .19 for the state assessments. This is equivalent to a gain of 8 percentile points; for a student at the 50th percentile, an effect size of .19 would produce a gain to the 58th percentile. Fifth grade students in the treatment group achieved significantly higher scores on the state math assessment than fifth grade students in the control group. The results show an effect size of .18 for the state assessment. This is equivalent to a gain of 7 percentile points; for a student at the 50th percentile, an effect size of .18 would produce a gain to the 57th percentile. https://www.mathlearningcenter.org/sites/default/files/documents/Bridges%20in%20Mathematics%20Effectiveness%20Study.pdf
What is the strength of the evidence? Under what conditions was the evidence developed?	Approximately 1,000 students in fourth and fifth grade Colorado classrooms participated in the study. Students who received Bridges instruction showed significantly greater improvement in mathematics skills. The study employed a quasi-experimental design with matched treatment and control groups. All students were assessed both before receiving instruction and at the end of the instruction. The mathematics skills of the treatment group were compared with the control group. Students in the treatment group were matched to the students in the control group based on pre-test results, and then compared based on the post-test results. The study employed both quantitative and qualitative methods. The quantitative approach employed a quasi-experimental design, comparing the growth in mathematics skills between two groups of students: those who received math instruction with Bridges (treatment group) and comparable students who received math instruction with a different curriculum (control group). The two groups were matched statistically to ensure any differences found in math ability at the end of the instruction was due to the treatment (instruction with Bridges). The growth in mathematics skills were assessed by comparing results for the 2015-2016 state assessments results before instruction and the 2016-2017 assessment results after instruction.

Evidence Based Practice #2: Bridges

What outcomes are expected when the innovation is implemented as intended? How much of a change can be expected?	Fourth grade students in the treatment group achieved significantly higher scores on the state math assessment than fourth grade students in the control group. The results show an effect size of .19 for the state assessments. This is equivalent to a gain of 8 percentile points; for a student at the 50th percentile, an effect size of .19 would produce a gain to the 58th percentile. Fifth grade students in the treatment group achieved significantly higher scores on the state math assessment than fifth grade students in the control group. The results show an effect size of .18 for the state assessment. This is equivalent to a gain of 7 percentile points; for a student at the 50th percentile, an effect size of .18 would produce a gain to the 57th percentile. The results of this study indicate that students who receive instruction that includes Bridges significantly outperform students who receive instruction without Bridges. Taken with the positive evaluation of the program by teachers, these findings suggest that Bridges is an effective tool for improving student math skills.
If research data are not available, are there evaluation data to indicate effectiveness (e.g. pre/post data, testing results, action research)? If yes, provide citations or links to evaluation reports.	N/A
Is there practice-based evidence or community-defined evidence to indicate effectiveness? If yes, provide citations or links.	Bridges in Mathematics by The Math Learning Center is a comprehensive classroom-based, PK-5 curriculum that equips teachers to implement the Common Core State Standards for Mathematics. It is designed to be rigorous, coherent, engaging, and accessible to all learners. The curriculum focuses on developing students' understanding of mathematical concepts, proficiency with key skills, and ability to solve complex and novel problems. Bridges blends direct instruction, structured investigation and open exploration, capitalizing on the existing knowledge and intelligence of students. The material presented is rich linguistically, visually, and kinesthetically. Students are presented with multi-step problems that require mathematical reasoning and understanding to solve. The test also asks students to apply mathematical concepts and equations to solve real-world problems. The raw score is weighed against a scale to allow for accurate comparison across test forms and administration years within a grade or course and content area. https://www.mathlearningcenter.org/sites/default/files/documents/Bridges%20in%20Mathematics%20Effectiveness%20Study.pdf

Evidence Based Practice #2: Bridges

Is there a well-developed theory of change or logic model that demonstrates how the innovation is expected to contribute to short term and long-term outcomes?	Teachers felt that Bridges was an effective tool for developing student math skills, These teachers also report that they were likely to recommend Bridges to their colleagues. Treatment group teachers were asked to rate the effectiveness of Bridges in Mathematics on a five-point scale ranging from "very ineffective" to "very effective." Three fifths (60%) of the teachers said the program was "very effective," while the remaining two fifths (40%) rated the program as "effective". To shed further light on the overall effectiveness ratings, the treatment group teachers were asked to provide their perceptions of specific aspects of Bridges materials. More than four fifths (87%) of the teachers indicated that they "strongly agreed" or "agreed" that the Bridges materials were more robust than those they used in the past and that the materials were well aligned to Common Core State Standards. Similarly, about four fifths of the teachers reported that the teacher materials are effective and that, by using Bridges, they were able to easily identify students who need extra assistance or practice.
Do the studies (research and/or evaluation) provide data specific to the setting in which it will be implemented (e.g., has the innovation been researched or evaluated in a similar context?) If yes, provide citations or links to evaluation reports.	Nine elementary schools in two Colorado school districts participated in the study. The school districts were in Colorado Springs and Windsor Colorado. The schools in the study ranged in demographic student groups (African American, Caucasian, Hispanic, etc.) and were in an urban and suburban setting. https://www.mathlearningcenter.org/sites/default/files/documents/Bridges%20in%20Mathematics%20Effectiveness%20Study.pdf
Do the studies (research and/or evaluation) provide data specific to effectiveness for culturally and linguistically specific populations? If yes, provide citations or links specific to effectiveness for families or communities from diverse cultural groups?	Nine elementary schools in two Colorado school districts participated in the study. The school districts were in Colorado Springs and Windsor Colorado. The schools in the study ranged in demographic student groups (African American, Caucasian, Hispanic, etc.) and were in an urban and suburban setting. The fourth-grade treatment group contained 269 students, and the control group contained 269 students, with one control student matching each unique treatment student. The fifth-grade treatment group contained 245 students and the control group contained 245 students, with one control group matching each unique treatment student. The gender distribution was nearly identical. The fifth-grade treatment and control group participants were comparable. The gender distribution for both groups was similar, though there was a somewhat higher percentage of female students in the treatment group. First, a quasi-experimental study was conducted, comparing the skills growth of students in classroom that used Bridges (treatment group) with students in classrooms that did not use Bridges (control group). Students in the treatment group were matched statistically to students in the control group to ensure the two groups were similar in ability and gender. The student were tested before receiving instruction (pre-test) adn at the end of the instruction (post-test) using the state math assessment (PARCC). https://www.mathlearningcenter.org/sites/default/files/documents/Bridges%20in%20Mathematics%20Effectiveness%20Study.pdf

Evidence Based Practice #3: Shipley

Are there research data available to demonstrate the effectiveness (e.g. randomized trials, quasi-experimental designs) of the innovation? If yes, provide citations or links to reports or publications.	Park, Sandra, et al. "Continuous Improvement in Education." Carnegie Foundation for the Advancement of Teaching, 2013, pp. 1-48.
What is the strength of the evidence? Under what conditions was the evidence developed?	This scan analyzed 11 distinctive organizations that are, to varying degrees and approaches, engaged in continuous improvement. These organizations were identified via a snowball sampling method, and three of these (i.e., School District of Menomonee Falls, Montgomery Country School District, and Strive Cincinnati) were selected as elaborative case examples to illustrate findings. The data gathered for this white paper was compiled through a 90-day scan, which was comprised of a combination of literature reviews and unstructured individual interviews with representatives from organizations variously engaged in continuous improvement. During this scan, organizations were sought that met one or more of the following criteria: they have adopted formal quality improvement processes (e.g., Lean, Six Sigma6); they have been formally recognized in the field for successful continuous improvement work; or they train schools and districts in continuous improvement methods. The School District of Menomonee Falls (SDMF) serves 4,270 students with 550 full- and part-time staff in four elementary schools, one middle school, and one high school. The village of Menomonee Falls is located in the greater Milwaukee area and has a population of approximately 32,600. Montgomery County Public Schools (MCPS) is the largest school district in Maryland and the seventeenth largest in the nation. Since the mid-1980s, the district has grown by almost one-third, its minority population close to doubling. The district now serves approximately 147,000 students; almost 34 percent of students are white, 26 percent Hispanic, 21 percent African-American, and 14 percent Asian; 32 percent receive free or reduced-price meals. The student population represents 164 countries speaking 184 languages. When recently retired superintendent Jerry Weast started his tenure at MCPS in 1999, he set an ambitious goal for the district: by 2014, 80 percent of all students would be prepared for college and career ready. By setting this expectation for all students, Weast also highlighted his desire to close the achievement gap between white and African-American and Hispanic students. During his twelve-year tenure, the district made dramatic progress toward these goals.
What outcomes are expected when the innovation is implemented as intended? How much of a change can be expected?	This white paper makes four concluding observations. First, the three case studies provide evidence of organizations conducting continuous improvement work in the field of education, albeit at different levels and in different ways. Second, entry points to continuous improvement work are not mutually exclusive, but are nested and, hence, mutually informative and comparative. Third, continuous improvement is not synonymous with improving all organizational processes simultaneously; rather, research and learning cycles are iterative and gradual in nature. Fourth, despite being both iterative and gradual, it is imperative that improvement work is planned and undertaken in a rigorous, thoughtful, and transparent fashion.

Evidence Based Practice #3: Shipley

	Improvement science is not the same as research. Research is designed to find out what is possible. Improvement science is not the same as audit. Audit is designed to find out what is actual. Improvement science describes how to reduce the gap between what is actual and what is possible (Health Foundation, 2011: 6). Shojania and Grimshaw (2005) describe the goal of this research process as ensuring that quality improvement efforts made by organizations are based on a high warrant of evidence.
If research data are not available, are there evaluation data to indicate effectiveness (e.g. pre/post data, testing results, action research)? If yes, provide citations or links to evaluation reports.	Numerous themes and common elements can be observed in all three cases, as well as other (non-case example) improvement organizations researched for this white paper, regardless of the level at which work is begun and targeted. Leadership and Strategy: Leaders of continuous improvement organizations bring a learning mindset to the work. They do not believe in silver bullets as a strategy for improvement, instead they focus on establishing disciplined processes for developing, testing, evaluating, and improving its core work streams and programs for building capacity to engage in this type of work. Communication and Engagement: Effective communication and strategies are critical in engaging all stakeholders in an organization's work. Many of the organizations studied apply a systems-thinking approach to their work; as a result, breaking down the silos and bringing together individuals from across the system is a natural part of how they do business. This allows them to understand the root causes of the problems they face, develop a collective vision for the entire organization, and to execute on strategies that recognize the interdependency of the organization's key processes. Most importantly, it builds a clear sense of shared accountability among all the workers and larger constituency. Organizational Infrastructure: Again building on systems thinking, organizations engaged in continuous improvement tend to set up structures across core processes or around specific goals, both of which promote interactions across different parts of an organization. Data Collection and Analysis Using data to track an organization's progress toward its goals is a critical piece of improvement. Indeed, almost all of the organizations we studied use data to monitor their work. Capacity Building Again, as with any new approach, organizations must invest time and energy in training staff to embed this process into day-to-day work and to create an organizational structure that supports the approach. This is particularly true of continuous improvement, which often runs counter to how many education organizations have worked in the past.

Evidence Based Practice #3: Shipley

Is there practice-based evidence or community-defined evidence to indicate effectiveness? If yes, provide citations or links.	These organizations focus on the use of student data to drive instructional improvement in the classroom; the inquiry process is thus largely built around analyzing student data. Given that the primary goal is to get teachers to use the data to improve instructional and classroom processes, this focus motivates infrastructural changes and changes in practice from the bottom-up (i.e., from the classroom to the school and sometimes district levels). Two such examples are the creation of grade-level or school data committees that look at data (on both processes and outcomes) or the assignment of instructional coaches who train teachers on how to analyze and use data regularly to inform instructional practices and processes. This category includes charter management organizations, as well as organizations that support schools and districts in using their own inquiry frameworks that promote data-informed decision-making at the classroom level. [Park, Sandra, et al. "Continuous Improvement in Education." Carnegie Foundation for the Advancement of Teaching, 2013, pp. 1-48.](#)
Is there a well-developed theory of change or logic model that demonstrates how the innovation is expected to contribute to short term and long-term outcomes?	Quality improvement is the disciplined use of evidence-based quantitative and qualitative methods to improve the effectiveness, efficiency, equity, timeliness or safety of service delivery processes and systems2 (inclusive of the human resources within that system) toward the pursuit of better services or outcomes for 'users' or customers of the system (URC, 2012).3 This definition comprises five interrelated aspects of quality improvement. First, quality improvement focuses on system outcomes for a defined population of beneficiaries, as well as the processes that lead to these results: it requires both a problem- and user-centered design. That is, the work should center on engaging relevant actors in co-developing testable hypotheses for the specific problem the organization is attempting to solve. Second, variation in system performance, inclusive of processes and outcomes, is essential to improvement work. Indeed, improvement cannot occur in the absence of standard practices since variation makes it difficult to determine what has been improved and what is due to random noise. Third, the ability to 'see the system' is paramount. There is the implicit recognition in quality improvement work that every system is perfectly designed to achieve the results it gets,4 which means that results are the natural products of the current state of affairs. This also requires that quality improvement is context-embedded: it "entails an engineering orientation where the varied demands and details of local contexts are a direct object of study and design" (Bryk & Gomez: 10). Such 'sticky' information about user needs and the context of use are essential for innovation work in education (von Hippel, 2005; Bryk et al., 2010). A 'systems' perspective implies that, in order to achieve improved results, one must of necessity alter the system and the ways of working in it. Fourth, a prerequisite for quality improvement is the capacity to measure and track key processes and outcomes. The act of measurement should be embedded in day-to-day work and used to determine whether a change in fact constitutes an improvement. Fifth, quality improvement entails the employment of a specific and coherent methodology to improve system services and processes. Many such formal methodologies exist (e.g., Lean, Six Sigma, the Model for Improvement) and these differ to a greater or lesser extent, but the germane point here is that quality improvement requires the application of an evidence-based methodology, with its inherent standards, protocols and guidelines.

Evidence Based Practice #3: Shipley

	These three features of continuous improvement (i.e., frequency, depth, and system contextualization) draw in part from two distinct frameworks for organizational learning that are important to briefly highlight here. Douglas Englebart (1992, 2003) articulated a stratified model of organizational improvement comprised of three levels of activity. The 'A' level activity represents the organization's primary activity (e.g., teaching and learning). 'B' level activity is concerned with improving the capability within the organization to perform A-level functions through the use of quality improvement methodologies. Englebart realized, however, that as organizations improve at A-level activities through B-level work, rates of return will inherently fall off. In other words, there is only so far that an organization can go toward improving upon desired outcomes via the same methodologies; organizations need to improve their ability to improve. This C-level of activity is "inter-institutional, representing the capacity for learning to occur across organizations.
Do the studies (research and/or evaluation) provide data specific to the setting in which it will be implemented (e.g., has the innovation been researched or evaluated in a similar context?) If yes, provide citations or links to evaluation reports.	A 'snowball' sampling approach to data collection, which started with a short list of referred organizations, was employed; other organizations were added to the research plan as they were referred to in interviews or readings. To the extent possible, efforts were made to obtain a diverse mix of types of organizations, including school districts, individual schools, improvement science consultants, technical assistance organizations, and community partnerships. The School District of Menomonee Falls (SDMF) serves 4,270 students with 550 full- and part-time staff in four elementary schools, one middle school, and one high school. The village of Menomonee Falls is located in the greater Milwaukee area and has a population of approximately 32,600. Montgomery County Public Schools (MCPS) is the largest school district in Maryland and the seventeenth largest in the nation. Since the mid-1980s, the district has grown by almost one-third, its minority population close to doubling. The district now serves approximately 147,000 students; almost 34 percent of students are white, 26 percent Hispanic, 21 percent African-American, and 14 percent Asian; 32 percent receive free or reduced-price meals. The student population represents 164 countries speaking 184 languages. When recently retired superintendent Jerry Weast started his tenure at MCPS in 1999, he set an ambitious goal for the district: by 2014, 80 percent of all students would be prepared for college and career ready. By setting this expectation for all students, Weast also highlighted his desire to close the achievement gap between white and African-American and Hispanic students. During his twelve-year tenure, the district made dramatic progress toward these goals. Park, Sandra, et al. "Continuous Improvement in Education." Carnegie Foundation for the Advancement of Teaching, 2013, pp. 1-48.

Evidence Based Practice #3: Shipley

Do the studies (research and/or evaluation) provide data specific to effectiveness for culturally and linguistically specific populations? If yes, provide citations or links specific to effectiveness for families or communities from diverse cultural groups?	The School District of Menomonee Falls (SDMF) serves 4,270 students with 550 full- and part-time staff in four elementary schools, one middle school, and one high school. The village of Menomonee Falls is located in the greater Milwaukee area and has a population of approximately 32,600. The district still strives to do better, particularly with reference to three demographics of concern: economically disadvantaged children, students with disabilities, and those of minority status. Montgomery County Public Schools (MCPS) is the largest school district in Maryland and the seventeenth largest in the nation. Since the mid-1980s, the district has grown by almost one-third, its minority population close to doubling. The district now serves approximately 147,000 students; almost 34 percent of students are white, 26 percent Hispanic, 21 percent African-American, and 14 percent Asian; 32 percent receive free or reduced-price meals. The student population represents 164 countries speaking 184 languages. When recently retired superintendent Jerry Weast started his tenure at MCPS in 1999, he set an ambitious goal for the district: by 2014, 80 percent of all students would be prepared for college and career ready. By setting this expectation for all students, Weast also highlighted his desire to close the achievement gap between white and African-American and Hispanic students. During his twelve-year tenure, the district made dramatic progress toward these goals. Park, Sandra, et al. "Continuous Improvement in Education." Carnegie Foundation for the Advancement of Teaching, 2013, pp. 1-48.

Evidence Based Practice #4: PD

Are there research data available to demonstrate the effectiveness (e.g. randomized trials, quasi-experimental designs) of the innovation? If yes, provide citations or links to reports or publications.	Twenty effect sizes and improvement indices were computed across the nine studies (table 1; see box 2 for methodology and definitions). The average effect size across the nine studies was 0.54, ranging from –0.53 to 2.39. The average improvement index was 21, ranging from –20 to 49. Of the 20 effects, 12 were not statistically significant after applying necessary corrections for unaddressed clustering and multiple outcomes. Nine of those twelve, however, are substantively important according to What Works Clearinghouse conventions. Fifteen of the effects came from the five randomized controlled trials that meet What Works Clearinghouse standards. The average effect size for the randomized controlled trials was 0.51, ranging from 0 to 1.11. Five of the effects came from four studies that meet What Works Clearinghouse standards with reservations (three quasi experimental designs and one problematic randomized controlled trial). The average effect size was 0.61, ranging from –0.53 to 2.39. \newline\newline Yoon, K. S., Duncan, T., Lee, S. W.-Y., Scarloss, B., & Shapley, K. (2007). Reviewing the evidence on how teacher professional development affects student achievement (Issues & Answers Report, REL 2007–No. 033). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. Retrieved from http://ies.ed.gov/ncee/edlabs
What is the strength of the evidence? Under what conditions was the evidence developed?	All nine studies focused on elementary school teachers and their students. About half focused on lower elementary grades (kindergarten and first grade), and about half on upper elementary grades (fourth and fifth grades). Six studies were published in peer-reviewed journals; three were unpublished doctoral dissertations. The studies were not particularly recent, ranging from 1986 to 2003. Five studies were randomized controlled trials that meet evidence standards without reservations. Four studies meet evidence standards with reservations (one randomized controlled trial with group equivalence problems and three quasi-experimental designs). Four focused on student achievement in reading and English/language arts—unsurprising given the large literature in this content area. Two studies focused on mathematics, two on mathematics and reading and English/language arts, one on science, and one on mathematics, science, and reading and English/language arts
What outcomes are expected when the innovation is implemented as intended? How much of a change can be expected?	No Child Left Behind sets five criteria for professional development to be considered high quality: It is sustained, intensive, and content focused—to have a positive and lasting impact on classroom instruction and teacher performance. It is aligned with and directly related to state academic content standards, student achievement standards, and assessments. It improves and increases teachers' knowledge of the subjects they teach. It advances teachers' understanding of effective instructional strategies founded on scientifically based research. It is regularly evaluated for effects on teacher effectiveness and student achievement.
If research data are not available, are there evaluation data to indicate effectiveness (e.g. pre/post data, testing results, action research)? If yes, provide citations or links to evaluation reports.	N/A

Evidence Based Practice #4: PD

Is there practice-based evidence or community-defined evidence to indicate effectiveness? If yes, provide citations or links.	All nine studies employed workshops or summer institutes. In all but one follow-up sessions supported the main professional development event (see table 3 on page 15). In all nine studies professional development went directly to teachers rather than through a train-the-trainer approach and was delivered by the authors or their affiliated researchers. Yoon, K. S., Duncan, T., Lee, S. W.-Y., Scarloss, B., & Shapley, K. (2007). Reviewing the evidence on how teacher professional development affects student achievement (Issues & Answers Report, REL 2007–No. 033). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. Retrieved from http://ies.ed.gov/ncee/edlabs
Is there a well-developed theory of change or logic model that demonstrates how the innovation is expected to contribute to short term and long-term outcomes?	In the first step, professional development must be of high quality in its theory of action, planning, design, and implementation. It should be intensive, sustained, content focused, coherent, well defined, and strongly implemented (Garet et al., 2001; Guskey, 2003; Loucks-Horsley, Hewson, Love, & Stiles, 1998; Supovitz, 2001; Wilson & Berne, 1999). It should be based on a carefully constructed and empirically validated theory of teacher learning and change (Ball & Cohen, 1999; Richardson & Placier, 2001; Sprinthall, Reiman, & Thies-Sprinthall, 1996). It should promote and extend effective curricula and instructional models—or materials based on a well-defined and valid theory of action (Cohen, Raudenbush, & Ball, 2002; Hiebert & Grouws, 2007; Rossi, Lipsey, & Freeman, 2004). In the second step, teachers must have the motivation, belief, and skills to apply the professional development to classroom teaching (Borko, 2004; Showers, Joyce, & Bennett, 1987), supported by ongoing school collaboration and follow-up consultations with experts. Doing so could require overcoming such barriers to new practices as lack of time for preparation and instruction, limited materials and human resources, and lack of follow-up support from professional development providers. In the third step, teaching—improved by professional development—raises student achievement. The challenge is evaluating the gains.

Evidence Based Practice #4: PD

Do the studies (research and/or evaluation) provide data specific to the setting in which it will be implemented (e.g., has the innovation been researched or evaluated in a similar context?) If yes, provide citations or links to evaluation reports.	Target populations for this review include the students of K–12 teachers of English/language arts/reading, mathematics, and science. Although we would like to be able to examine how the effect of teacher professional development on student achievement varies by student characteristics (for example, English language learners, economically disadvantaged students, students with disabilities), we do not expect to find many studies that directly address student outcomes, which are distal effects of professional development given to teachers. The effectiveness of professional development on student achievement may also vary by settings. A study may examine the effects of professional development across different settings. These settings may include: School or class size. School-level poverty and minority concentration level. School location (urban, rural, suburban). Appendix B 33. School improvement status under No Child Left Behind. Classroom types (for example, general education or special education, inclusion classrooms) Yoon, K. S., Duncan, T., Lee, S. W.-Y., Scarloss, B., & Shapley, K. (2007). Reviewing the evidence on how teacher professional development affects student achievement (Issues & Answers Report, REL 2007–No. 033). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. Retrieved from http://ies.ed.gov/ncee/edlabs
Do the studies (research and/or evaluation) provide data specific to effectiveness for culturally and linguistically specific populations? If yes, provide citations or links specific to effectiveness for families or communities from diverse cultural groups?	Target populations for this review include the students of K–12 teachers of English/language arts/reading, mathematics, and science. Although we would like to be able to examine how the effect of teacher professional development on student achievement varies by student characteristics (for example, English language learners, economically disadvantaged students, students with disabilities), we do not expect to find many studies that directly address student outcomes, which are distal effects of professional development given to teachers. Effectiveness of professional development across different groups. The effect of professional development on student achievement may vary by student characteristics. A study may examine the effects of professional development within important student subgroups, which may include: Students with different learning styles, students with disabilities, students with special learning needs (including students who are gifted and talented), and students with limited English proficiency. Students of differing achievement levels (for example, poor readers, underachievers) Students who are ethnic or racial minorities. Yoon, K. S., Duncan, T., Lee, S. W.-Y., Scarloss, B., & Shapley, K. (2007). Reviewing the evidence on how teacher professional development affects student achievement (Issues & Answers Report, REL 2007–No. 033). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. Retrieved from http://ies.ed.gov/ncee/edlabs

Evidence Based Practice #5: Instructional Coaching

Are there research data available to demonstrate the effectiveness (e.g. randomized trials, quasi-experimental designs) of the innovation? If yes, provide citations or links to reports or publications.	A meta-analysis of 37 studies of teacher coaching, many focused on literacy coaching, reveals that coaching positively affects both teaching practice and student achievement. The effect size distribution of coaching on teaching practice and student achievement is normal with an interquartile range for effect on teaching from .14 standard deviation to .92 standard deviation and between.01 standard deviation and .21 standard deviation for student achievement. The pooled effect size of coaching on teacher practice is .57 standard deviation (p<.001) across the 25 studies with a measure of instructional practice. The effects are larger (.71 standard deviation, p<.001) in coaching programs focused on general practices than on content-specific coaching programs (.51standard deviation, p<.001).In addition, all models of teacher coaching, across all content areas combined, have a positive effect (.11standard deviation, p<.001) on student achievement when pooled across reading, math, and science as measured on standardized tests, a finding drawnfrom the effect sizes reported in 21studies. Content-specific coaching in reading (22 of 26 studies) has a .12standard deviation (p<.001) on student reading achievement. Killion, Joellen. (2017, March 31). Meta-Analysis Reveals Coaching's Positive Impact on Instruction and Achievement. Learning Professional, 38 (2), pp. 20-23 Retrieved from https://eric.ed.gov/?id=EJ1141732
What is the strength of the evidence? Under what conditions was the evidence developed?	A meta-analysis of 37 studies of teacher coaching, many focused on literacy coaching, reveals that coaching positively affects both teaching practice and student achievement. In this study, researchers examined 37 studies of teacher coaching that met the following criteria: causal or quasi experimental design and measures of effects on instructional practice and/or student achievement. Applying meta-analytics, researchers examined questions that a single experimental design study could not answer, including the pooled effects of different coaching models to measure the efficacy of coaching as a form of professional development; leveraging statistical power to examine the cost effectiveness of coaching; the effects of different models and features of coaching; and the effects of smaller versus larger coaching programs to explore solutions to challenges related to bringing coaching programs to scale.
What outcomes are expected when the innovation is implemented as intended? How much of a change can be expected?	The pooled effects of both general coaching and content specific coaching have a positive and significant effect on teacher instruction as measured by classroom observations. The effect size distribution of coaching on teaching practice and student achievement is normal with an interquartile range for effect on teaching from .14 standard deviation to .92 standard deviation and between.01 standard deviation and .21 standard deviation for student achievement. The pooled effect size of coaching on teacher practice is .57 standard deviation (p<.001) across the 25 studies with a measure of instructional practice. The effects are larger (.71 standard deviation, p<.001) in coaching programs focused on general practices than on content-specific coaching programs (.51standard deviation, p<.001).In addition, all models of teacher coaching, across all content areas combined, have a positive effect (.11standard deviation, p<.001) on student achievement when pooled across reading, math, and science as measured on standardized tests, a finding drawnfrom the effect sizes reported in 21studies. Content-specific coaching in reading (22 of 26 studies) has a .12standard deviation (p<.001) on student reading achievement.

Evidence Based Practice #5: Instructional Coaching

If research data are not available, are there evaluation data to indicate effectiveness (e.g. pre/post data, testing results, action research)? If yes, provide citations or links to evaluation reports.	N/A
Is there practice-based evidence or community-defined evidence to indicate effectiveness? If yes, provide citations or links.	For the purpose of this study, they defined "coaching programs broadly as all PD programs that incorporate coaching as a key feature of the model" (p. 7). Multiple people can provide coaching, including administrators, master teachers, external experts, and others. They described the coaching process as discussions with teachers about classroom practice in a way that is: • Individualized: Coaching sessions are one-on-one; • Intensive: Coaches and teachers interact at least every couple of weeks; • Sustained: Teachers receive coaching over an extended period of time; • Context-specific: Teachers are coaches on their practices within the context of their own classroom; and • Focused: Coaches work with teachers to engage in deliberate practice of specific skills (p. 8). Killion, Joellen. (2017, March 31). Meta-Analysis Reveals Coaching's Positive Impact on Instruction and Achievement. Learning Professional, 38 (2), pp. 20-23 Retrieved from https://eric.ed.gov/?id=EJ1141732
Is there a well-developed theory of change or logic model that demonstrates how the innovation is expected to contribute to short term and long-term outcomes?	Nearly all (89%) of the coaching models were paired with other forms of professional development, most often group training. For the purpose of this study, they defined "coaching programs broadly as all PD programs that incorporate coaching as a key feature of the model" (p. 7). Multiple people can provide coaching, including administrators, master teachers, external experts, and others. They described the coaching process as discussions with teachers about classroom practice in a way that is: • Individualized: Coaching sessions are one-on-one; • Intensive: Coaches and teachers interact at least every couple of weeks; • Sustained: Teachers receive coaching over an extended period of time; • Context-specific: Teachers are coaches on their practices within the context of their own classroom; and • Focused: Coaches work with teachers to engage in deliberate practice of specific skills (p. 8).
Do the studies (research and/or evaluation) provide data specific to the setting in which it will be implemented (e.g., has the innovation been researched or evaluated in a similar context?) If yes, provide citations or links to evaluation reports.	The study used an experimental design in eight purposefully selected districts. We recruited districts that met the following criteria: (1) had at least 20 elementary and middle schools, (2) had data systems that were sufficient to support value-added analysis, and (3) had current performance measures and feedback that were less intensive than that implemented as part of the study. Schools differed in student demographics and location. Garet, M.S., Wayne, A.J., Brown, S., Rickles, J., Song, M., and Manzelske, D. (2017). The Impact of Providing Performance Feedback to Teachers and Principals, Executive Summary (NCEE 2018-4000). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

Evidence Based Practice #5: Instructional Coaching

Do the studies (research and/or evaluation) provide data specific to effectiveness for culturally and linguistically specific populations? If yes, provide citations or links specific to effectiveness for families or communities from diverse cultural groups?	The study used an experimental design in eight purposefully selected districts. We recruited districts that met the following criteria: (1) had at least 20 elementary and middle schools, (2) had data systems that were sufficient to support value-added analysis, and (3) had current performance measures and feedback that were less intensive than that implemented as part of the study. Schools differed in student demographics and location. Garet, M.S., Wayne, A.J., Brown, S., Rickles, J., Song, M., and Manzelske, D. (2017). The Impact of Providing Performance Feedback to Teachers and Principals, Executive Summary (NCEE 2018-4000). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

Evidence Based Practice #6: Guided Reading

Are there research data available to demonstrate the effectiveness (e.g. randomized trials, quasi-experimental designs) of the innovation? If yes, provide citations or links to reports or publications.	The purpose of this article was to illuminate for early childhood teacher practitioners how guided reading, as a research-based approach to reading instruction, could address the challenges of early reading instruction. Iaquinta, A. (2006). Guided reading: A research-based response to the challenges of early reading instruction. Early Childhood Education Journal, 33(6), 413–418. This yearlong quasi experimental study examined the effects of two approaches to guided reading on second-grade students' reading abilities. The 79 subjects were chosen as a nonprobability sample and served as the treatment and comparison groups. The groups were pre- and post tested using the Developmental Reading Assessment, Second Edition determine students' reading levels. A 2 £ 2 repeated measures analysis of variance revealed significant main and interaction effects. According to a post hoc analysis of mean difference effect size, both groups experienced very large effects, but treatment effects (d D 3.66) were much larger than the comparison (d D 1.34). The results suggest that increased emphasis on guided reading can lead to a greater impact on second-grade students' reading ability. Young, Chase. (2019). Increased frequency and planning: A more effective approach to guided reading in Grade 2, The Journal of Educational Research, 112:1,121-130, DOI: 10.1080/00220671.2018.1451814
What is the strength of the evidence? Under what conditions was the evidence developed?	This yearlong quasi experimental study examined the effects of two approaches to guided reading on second-grade students' reading abilities. The 79 subjects were chosen as a nonprobability sample and served as the treatment and comparison groups. The groups were pre- and post tested using the Developmental Reading Assessment, Second Edition determine students' reading levels. A 2 £ 2 repeated measures analysis of variance revealed significant main and interaction effects. According to a post hoc analysis of mean difference effect size, both groups experienced very large effects, but treatment effects (d D 3.66) were much larger than the comparison (d D 1.34). The results suggest that increased emphasis on guided reading can lead to a greater impact on second-grade students' reading ability. Young, Chase. (2019). Increased frequency and planning: A more effective approach to guided reading in Grade 2, The Journal of Educational Research, 112:1,121-130, DOI: 10.1080/00220671.2018.1451814
What outcomes are expected when the innovation is implemented as intended? How much of a change can be expected?	One particular research-based strategy, guided reading, is an important ''best practice'' associated with today's balanced literacy instruction. It has become one of the most important contemporary reading instructional practices in the U.S. (Fawson & Reutzel, 2000) and accepted as a particularly appropriate strategy for children who are moving toward fluency in the early years of literacy development (Mooney, 1990). The purpose of this article is to: (1) define and describe the key elements of guided reading; (2) provide a rationale for guided reading; (3) describe the teacher's role in the guided reading process; and (4) demonstrate how to implement a guided reading lesson into practice. Iaquinta, A. (2006). Guided reading: A research-based response to the challenges of early reading instruction. Early Childhood Education Journal, 33(6), 413–418.

Evidence Based Practice #6: Guided Reading

	Increased rigor, frequency, and duration of guided reading instruction can have a positive effect on second-grade students' independent reading levels. For years, researchers and educators have claimed that guided reading works (Fawson, & Reutzel, 2000; Fountas & Pinnell, 1996; Gambrell, Malloy, & Mazzoni, 2011), and this study further corroborates those claims. Though the data are impressive, what was truly impressive were the gains made by the actual students in the treatment classes. Some students increased from kindergarten reading levels to above grade level reading by the end of the year. This research may make a difference in the field, but the treatment made a significant difference for many of the students involved. A second-grade classroom with a mean DRA2 score of midlevel Grade 1 participated in daily guided reading and increased to an above-grade-level mean by the end of the year. Some of the students who might have failed actually succeeded. Guided reading continues to be a viable and effective option for teachers. Young, Chase. (2019). Increased frequency and planning: A more effective approach to guided reading in Grade 2, The Journal of Educational Research, 112:1,121-130, DOI: 10.1080/00220671.2018.1451814
If research data are not available, are there evaluation data to indicate effectiveness (e.g. pre/post data, testing results, action research)? If yes, provide citations or links to evaluation reports.	N/A
Is there practice-based evidence or community-defined evidence to indicate effectiveness? If yes, provide citations or links.	Guided reading is a teaching approach used with all readers, struggling or independent, that has three fundamental purposes: to meet the varying instructional needs of all the students in the classroom, enabling them to greatly expand their reading powers (Fountas & Pinnell, 2001); to teach students to read increasingly difficult texts with understanding and fluency; to construct meaning while using problem solving strategies to figure out unfamiliar words that deal with complex sentence structures, and understand concepts or ideas not previously encountered. Guided reading usually involves small groups of students who are at a similar place in their reading development. These students can demonstrate similar learning needs and process text at about the same level. Small-group instruction is effective because teaching is focused precisely on what the students need to learn next to move forward. Ongoing observation of students, combined with systematic assessment, enable teachers to draw together groups of students who fit a particular instructional profile. In a truly balanced literacy program, how you teach is as important as what you teach. Skillful teachers use their knowledge of literacy development and literacy processes to decide where to go next, independently of the commercial materials they use; when to intervene and when not to; when to draw children's attention to which features of text; and how to model and explain strategies in ways that children can make their own. Guided reading, as a component of a balanced literacy program, starts with good first teaching (Fountas & Pinnell, 1996). Iaquinta, A. (2006). Guided reading: A research-based response to the challenges of early reading instruction. Early Childhood Education Journal, 33(6), 413–418.

Evidence Based Practice #6: Guided Reading

Is there a well-developed theory of change or logic model that demonstrates how the innovation is expected to contribute to short term and long-term outcomes?	The goal of guided reading is to develop a self extending system of reading that enables the reader to discover more about the process of reading while reading. As children develop these understandings they self-monitor, search for cues, discover new things about the text, check one source of information against another, confirm their reading, self correct, and solve new words using multiple sources of information. Throughout this process, the central elements of accuracy, speed, and fluency increase and over time these systems become increasingly automatic. Therefore, the role of the teacher is essential to guided reading. Teachers must know how to prompt and guide students as they work to build this self extending system of reading (Table I).

Iaquinta, A. (2006). Guided reading: A research-based response to the challenges of early reading instruction. Early Childhood Education Journal, 33(6), 413–418.

The results of this study suggest that increased time spent in guided reading can have a large positive effect on students' reading ability. In addition, careful planning of guided reading lessons appears to be more effective. Although the treatment lesson description seems time intensive and complicated, repeated construction of the intricate plans eventually became more automatic and less time consuming. According to the results, the students benefited greatly from the extra time spent planning. Of course, it may seem intuitive that more intentional lessons yield more gains. Teachers should engage in careful planning and attention to objectives while considering the 128 C. YOUNG needs of individual students. Therefore, teachers are tasked to determine which instructional approaches and activities could be condensed or eliminated to spend time planning for more effective practices, such as guided reading.

Young, Chase. (2019). Increased frequency and planning: A more effective approach to guided reading in Grade 2, The Journal of Educational Research, 112:1,121-130, DOI: 10.1080/00220671.2018.1451814 |
| Do the studies (research and/or evaluation) provide data specific to the setting in which it will be implemented (e.g., has the innovation been researched or evaluated in a similar context?) If yes, provide citations or links to evaluation reports. | According to the National Research Council (NRC) (2002), one in five children is estimated to have difficulty learning to read in school; other researchers estimate that as many as 45% of our children are having difficulty learning to read (National Institute of Child Health and Human Development [NICHD], 1999). The NRC report asserts that reading problems are more likely to occur among children who are poor, are minorities, attend urban schools, or arrive at school not speaking English (Snow et al. 1998). The National Reading Panel (2000) argued that balanced approaches are preferable when teaching children to read, based on their review of scientific researchbased reading instructional practices used by teachers in classrooms across the country. Additionally, guided reading practices as part of a balanced literacy program conform to the recommendations on literacy as suggested in position statements by the International Reading Association/The National Association for the Education of Young Children (1998), and the National Council of Teachers of English (2002).

Iaquinta, A. (2006). Guided reading: A research-based response to the challenges of early reading instruction. Early Childhood Education Journal, 33(6), 413–418. |

Evidence Based Practice #6: Guided Reading

	The 79 subjects were chosen as a nonprobability sample from six different second-grade classrooms in a Title 1 school in the southern United States. The elementary school's demographics comprised 63% Hispanic, 20% White, 13% Black, and 3% of the students were two or more races. Of these students, 43% were English language learners. Seventy-seven percent of the students in the school participated in the free or reduced lunch program. The treatment group (n D 41) included 60% boys and 40% girls, and the demographics were 65% Hispanic, 23% White, and 12% Black. The comparison group (n D 38) included 65% boys and 35% girls and was 62% Hispanic, 22% White, and 16% Black. Thus, demographically, the groups were relatively similar. Young, Chase. (2019). Increased frequency and planning: A more effective approach to guided reading in Grade 2, The Journal of Educational Research, 112:1,121-130, DOI: 10.1080/00220671.2018.1451814
Do the studies (research and/or evaluation) provide data specific to effectiveness for culturally and linguistically specific populations? If yes, provide citations or links specific to effectiveness for families or communities from diverse cultural groups?	According to the National Research Council (NRC) (2002), one in five children is estimated to have difficulty learning to read in school; other researchers estimate that as many as 45% of our children are having difficulty learning to read (National Institute of Child Health and Human Development [NICHD], 1999). The NRC report asserts that reading problems are more likely to occur among children who are poor, are minorities, attend urban schools, or arrive at school not speaking English (Snow et al. 1998). The National Reading Panel (2000) argued that balanced approaches are preferable when teaching children to read, based on their review of scientific research based reading instructional practices used by teachers in classrooms across the country. Additionally, guided reading practices as part of a balanced literacy program conform to the recommendations on literacy as suggested in position statements by the International Reading Association/The National Association for the Education of Young Children (1998), and the National Council of Teachers of English (2002). Iaquinta, A. (2006). Guided reading: A research-based response to the challenges of early reading instruction. Early Childhood Education Journal, 33(6), 413–418. The 79 subjects were chosen as a nonprobability sample from six different second-grade classrooms in a Title 1 school in the southern United States. The elementary school's demographics comprised 63% Hispanic, 20% White, 13% Black, and 3% of the students were two or more races. Of these students, 43% were English language learners. Seventy-seven percent of the students in the school participated in the free or reduced lunch program. The treatment group (n D 41) included 60% boys and 40% girls, and the demographics were 65% Hispanic, 23% White, and 12% Black. The comparison group (n D 38) included 65% boys and 35% girls and was 62% Hispanic, 22% White, and 16% Black. Thus, demographically, the groups were relatively similar. Young, Chase. (2019). Increased frequency and planning: A more effective approach to guided reading in Grade 2, The Journal of Educational Research, 112:1,121-130, DOI: 10.1080/00220671.2018.1451814

Evidence Based Practice #7: Kagan Strategies

Are there research data available to demonstrate the effectiveness (e.g. randomized trials, quasi-experimental designs) of the innovation? If yes, provide citations or links to reports or publications.	Developers of Kagan Cooperative Learning model, which is explained in detail below, claimed that this model focuses on ensuring that cooperative learning is beneficial to the classroom learning environment (Kagan, 2009). Kagan, key developer of the Kagan Cooperative Learning model, identified four crises in America's public education system: "the achievement crisis, the achievement gap crisis, the race relations crisis, and the social skills crisis" (Kagan, 2009, p. 2.1). Kagan contended that cooperative learning is the best response to address these four crises. The focus for this study is the 7 achievement gap crisis. Kagan spoke of the need to address this crisis and help raise the achievement levels of students who are not performing as well as their peers. There was one research question that guided this study: Is there a statistically significant difference in the academic achievement in middle school mathematics of economically disadvantaged students who receive instruction from teachers who use Kagan's Cooperative Learning model with fidelity (Group A) when compared to their economically disadvantaged peers who receive instruction from teachers who do not use Kagan's Cooperative Learning model (Group B)? Mourning, E. (2014). Kagan Cooperative Learning Model and Mathematical Achievement of Economically Disadvantaged Middle School Students (Doctoral dissertation, Walden University) [Abstract].
What is the strength of the evidence? Under what conditions was the evidence developed?	A quasi-experimental repeated measures research design was used to compare the achievement effects of the use of the Kagan Cooperative Learning model on economically disadvantaged students in middle grades mathematics courses. Initially the paired t-test was used to compare the pretest and posttest scores within each group. This was done to strengthen the study by determining whether or not both learning environments, Groups A and B, were effective. To examine which learning environment had the greater effect, a one way analysis of covariance (ANCOVA) was also conducted for this study. ANCOVA allowed for comparing one variable in two groups while taking into consideration the variability of covariate (pretest scores). Because ANCOVA allowed for the inclusion of the pre and posttest scores from both groups, it increased the precision and power of the study. A paired-samples t test was conducted to compare scale scores on the 2011 NCEOG tests in mathematics and 2012 NCEOG tests in mathematics of economically disadvantaged students in Group A and Group B. For Group A, the mean of the pretest was 353.39. The group's mean rose to 358.54 on the posttest. For Group B, the mean of the pretest was 355.56 and rose to 357.78 on the posttest. Group A had 114 participants while Group B had 124. Group A experienced an increase of 5.15 scale score points while Group B experienced an increase of 2.22 scale score points. Table 6 displays the paired samples statistics. The research site had a total population of 580 students during the academic school year of 2011-2012.

Evidence Based Practice #7: Kagan Strategies

What outcomes are expected when the innovation is implemented as intended? How much of a change can be expected?	Through the use of Kagan, students should gain independence in their learning. They should learn to think critically to be able to solve mathematical problems and apply knowledge to everyday tasks. They should learn to explore new ways to come up with solutions to mathematical problems. Above all, they should learn to communicate mathematical thinking. This study contributed to the body of knowledge providing information on the impact of Kagan on this group of students in the area of mathematics. The results of the study reveal that the implementation of Kagan may have a positive impact on the mathematics achievement of economically disadvantaged middle school students. The study revealed that the difference in mean scores between the control group and the treatment group was statistically significant with students in the treatment group performing slightly higher.
If research data are not available, are there evaluation data to indicate effectiveness (e.g. pre/post data, testing results, action research)? If yes, provide citations or links to evaluation reports.	N/A
Is there practice-based evidence or community-defined evidence to indicate effectiveness? If yes, provide citations or links.	Within their classrooms, Group A teachers planned mathematics instruction according to the district pacing guides. Students were expected to learn objectives in the amount of time allotted on the pacing guides. The classroom curriculum was driven by the district pacing guide which was aligned with the state Standard Course of Study in mathematics. Teachers in Group A made every effort to ensure that all of the objectives were covered and that students had a grasp of all concepts that were introduced. In these classrooms, lesson delivery was driven by the use of Kagan structures and activities. Students in Group A classrooms were engaged in cooperative learning activities throughout the span of the 2011-2012 academic school year. Teachers in Group A met routinely with the school's administration to discuss their progress with the implementation of Kagan. They also received several coaching visits and refreshers on the implementation of Kagan in the classroom. The teachers were also made aware of the research topic. Mourning, E. (2014). Kagan Cooperative Learning Model and Mathematical Achievement of Economically Disadvantaged Middle School Students (Doctoral dissertation, Walden University) [Abstract].
Is there a well-developed theory of change or logic model that demonstrates how the innovation is expected to contribute to short term and long-term outcomes?	Upon reviewing the available literature, it can be concluded that the use of Kagan's cooperative learning model as an effective teaching and learning strategy is supported (Coates & Mayfield, 2009; High & Andrews, 2009; Johnson et al., 2010; Joritz-Nakagawa, 2003; Kagan, 2009; Kose et al., 2010; Marzano, 2003; Marzano et al., 2001). The literature reviewed for this study not only revealed the effectiveness of Kagan, but also supports Kagan as an appropriate teaching and learning strategy for middle school mathematics instruction.

Evidence Based Practice #7: Kagan Strategies

Do the studies (research and/or evaluation) provide data specific to the setting in which it will be implemented (e.g., has the innovation been researched or evaluated in a similar context?) If yes, provide citations or links to evaluation reports.	The eastern North Carolina school district covers approximately 695 square miles with a total population of 94,875 residents (District Home Page, 2013). The district has 15 elementary schools, five middle schools, five high schools, and three evening schools. The research site is one of the middle schools in the district. I focused on Kagan's Cooperative Learning model's effectiveness in raising the achievement of economically disadvantaged students in middle school mathematics courses. Mourning, E. (2014). Kagan Cooperative Learning Model and Mathematical Achievement of Economically Disadvantaged Middle School Students (Doctoral dissertation, Walden University) [Abstract].
Do the studies (research and/or evaluation) provide data specific to effectiveness for culturally and linguistically specific populations? If yes, provide citations or links specific to effectiveness for families or communities from diverse cultural groups?	The eastern North Carolina school district covers approximately 695 square miles with a total population of 94,875 residents (District Home Page, 2013). The district has 15 elementary schools, five middle schools, five high schools, and three evening schools. The research site is one of the middle schools in the district. I focused on Kagan's Cooperative Learning model's effectiveness in raising the achievement of economically disadvantaged students in middle school mathematics courses. Of the 580 students, 370 students (60.8%) were classified as economically disadvantaged because of their qualification for free or reduced lunch prices and participated in the 2012 North Carolina End of Grade (NCEOG) mathematics test. Mourning, E. (2014). Kagan Cooperative Learning Model and Mathematical Achievement of Economically Disadvantaged Middle School Students (Doctoral dissertation, Walden University) [Abstract].

FIRST QUARTER ACTION Plan			
Date Range of Plan		(Ex. April 1st - June 30th, 2020)	
45 Day Action Steps	**By Whom?/By When?**	**Funding (Amount/Fund)**	**Communication / Measurement**
Establish admin/leadership team for Shipley's System Work	Principal, April 15, 2020	none	Identify team members
Order Shipley's Text and Systems Check	Principal, April 15, 2020	$124.75, School Funds	Purchase order
Train admin/leadership team in Shipley's Systems Approach	Principal & ERL, May 1, 2020	none	Admin meeting agendas/minutes
Draft systems for communication, PLCs, MTSS, and curriculum/ instruction	Admin/Leadership team, June 30, 2020	none	School plan/system created for: communication, PLCs, MTSS, and curriculum/ instruction
Develop 2020-2021 master instructional schedule	Admin/Leadership team, June 30, 2020	none	Share master instructional calendar with staff
Order Bridges Curriculum	Principal, June 30, 2020	$27,060.30, SIF	Purchase order
Update JCPS ELA units/curriculum with Journeys reading program literature	Teacher Grade Level Reps, June 30, 2020	none	Completed updated units that are shared with all teachers
Order Guided Reading Resources -literacy footprints kits	Principal, June 30, 2020	$6,825, SIF	Purchase order
What is working? How do you know?	**What is not working? Why? (Where are the barriers?)**	**What are your next steps?**	**Additional Comments/Feedback**
School:	**School:**	**School:**	**Reviewer:**
CHECK POINT #1			

SECOND QUARTER ACTION Plan			
Date Range of Plan		(Ex. July 1st - September 30th, 2020)	
45 Day Action Steps	**By Whom?/By When?**	**Funding (Amount/Fund)**	**Communication / Measurement**
PLC Reboot Training	Assistant Principal, September 11, 2020	none	PLC training with staff
Establish PLC yearly calendar	Admin/leadership team, August 31, 2020	none	PLC yearly calendar will be created and shared with the staff
Bridges Mathematics Training	Instructional Coach and Bridges trainers, August 6, 2020	cost included in the curriculum purchase	Training with teachers
Teacher work day to integrate International Baccalaureate (IB) transdisciplinary themes into science and social studies units of study	Instructional Coach, August 6, 2020	none	International Baccalaureate (IB) units of study
Assign teacher peer mentors	Admin/leadership team, August 7, 2020	none	Teacher mentor list
Communicate WYES school systems to staff	Principal, August 7, 2020	none	School plan/system created for: communication, PLCs, MTSS, and curriculum/ instruction
International Baccalaureate (IB) in-person 2-day training	IB Coordinator and IB trainers, July 31, 2020	school funds	IB training with staff
Kagan year 1 training (2 days)	Instructional Coach and Kagan trainers, August 4, 2020	$8,922.65, SIF	Kagan training with staff
2 Extended PLCs	Teachers, October 6, 2020	$3,150, SIF	PLC meeting agenda and minutes
What is working? How do you know?	**What is not working? Why? (Where are the barriers?)**	**What are your next steps?**	**Additional Comments/Feedback**
School:	School:	School:	Reviewer:
CHECK POINT #2			