# Support Models: Matrix and Discussion Guide for K-12th Grade Systems

## Purpose and Audience:

The purpose of this resource is to help teams ensure that the implemented model of support (e.g., teacher coaching, systems coaching, training) leads to the desired outcomes (e.g., improved teacher practice, improved knowledge of teams on systems change). Teams working at the local or state level may find this tool helpful in supporting decision-making on which model(s) to select to meet intended outcomes, when first implementing the support model or after the model has been in place to examine impact and support refining implementation activities. This tool may also be useful when teams are in the process of selecting a specific support model for use.

## Overview:

This resource contains two parts:

* A [**matrix**](#_Matrix_of_Support) that summarizes research on various support models, including the following:
  + the name of the model and the extent of research on the model,
  + the defining features (referred to as “effective practices”) that must be present in order to attain the expected outcomes; if research is inconclusive, common features are describe,
  + information on how the support model is commonly used, including the venue and format,
  + links to fidelity measures to collect data on the degree to which the support model contains effective practices,
  + expected outcomes if the model includes effective practices; if research is inconclusive, some possible outcomes are listed, and
  + links to online resources.
* A [**discussion guide**](#_Discussion_Guide) that can be used to help teams ensure that the implemented support model leads to the attainment of the expected outcomes.
  + Column A contains prompts for individual reflection.
  + Column B contains prompts teams can use to structure productive discussions about the support model, with the intention of encouraging team consensus.

## Directions:

1. Individual team members review the Models of Support Matrix and respond, on their own, to the prompts shown in Column A of the discussion guide. Individually reviewing the matrix and the discussion guide prompts will give all team members an opportunity to critically reflect upon the support model.
2. Team members convene and share their individual responses to the prompts in Column A, starting with the first row (i.e., expected outcomes), and stopping after each team member has an opportunity to share his or her reflections.
3. Next, the whole team uses the discussion prompts in Column B to come to consensus about the content within that row.
4. The team continues the process row by row, until the logic of the support model aligns to the research recommendations in the matrix and the next steps are defined by the team.

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## Matrix of Support Models

| **Support Model and Extent of Research** | **Effective Practices: Defining Features of the Support Modela** | **Venue in Which Support Occurs (e.g., virtual, face-to-face, or both)** | **Format (one-on-one, teams, or both)** | **Measures of Fidelity: Tools That Capture Observable Data on the Use of Effective Practicesb** | **Expected Outcomes When Defining Features Are Presentc** |
| --- | --- | --- | --- | --- | --- |
| **One-on-one Teacher Coaching**(e.g., instructional coaching, behavioral coaching)  Extensive experimental and qualitative research from various fields (e.g., special education, general education, school psychology, implementation science, and mental health) | Coach conducts ongoing cycles of observation, modeling, providing performance feedback, and using alliance-building strategies\* with the teacher. These practices often occur in a three-step process, where the coach holds a pre-observation meeting with the teacher, next observes and models in the teacher’s classroom, and then holds a post-observation meeting to debrief the observation and provide performance feedback. Alliance strategies are used throughout the three step process.  *\*Alliance-building strategies*:   * Demonstrating expertise in the area in which coaching occurs (e.g., literacy, mathematics, behavior) * Collaborating (e.g., setting goals based on the needs of the recipient of coaching) * Communicating effectively (e.g., summarizing, active listening, asking open-ended questions) | Face to face  OR  Virtually (e.g., using technology where coach remotely observes the teacher and may use that technology to provide performance feedback and apply alliance-building strategies)  OR  A combination of face-to-face and virtually (e.g., using video recordings of teaching practice and then meeting face-to-face or virtually to provide performance feedback and apply alliance-building strategies) | One-on-one between a teacher and a coach | <https://ncsi-library.wested.org/resources/59>  <https://ncsi-library.wested.org/resources/58> | Improved teacher practice  Improved learner outcomes |
| **Team Teacher Coaching**(e.g., instructional coaching, behavioral coaching)  Some experimental and qualitative research, much of it related to team coaching of teacher–child interactions. Research is inconclusive but suggests that the coaching of teams of teachers includes the same practices as one-on-one coaching, with some adjustments. | Research is inconclusive.  Before the face-to-face session: Coach provides team of teachers with videos of exemplary teaching. Videos may be of the teachers within the team, of the coach, or of other teachers. Teachers work individually to review the videos and identify specific teaching behaviors that were exemplary and the impact of those practices on student performance.  During the face-to-face session: The coach and teachers watch the videos of exemplary teaching. The coach asks the teachers to discuss specific exemplary teaching behaviors. The coach provides performance feedback about the exemplary teaching to the whole group so that the team of teachers can make explicit linkages between exemplary teaching from the video and the impact on student performance. This cycle is repeated. Coach also uses alliance-building strategies\*.  *\*Alliance-building strategies*:   * Demonstrating expertise in the area in which coaching occurs (e.g., literacy)) * Collaborating (e.g., setting goals based on * the recipient needs) * High-quality communication skills (e.g., summarizing, active listening, asking open-ended questions) | Face to face with a team of teachers with videos of exemplary teaching | Teams of teachers and a coach |  | Some research suggests:   * improved knowledge of the content area in which coaching occurs * improved practice of the specific teaching practices included in the exemplary videos * improved learner outcomes in the area in which the video analysis occurs (e.g., literacy) |
| **Systems Coaching** (e.g., PBIS coaching, MTSS coaching)  Some qualitative and experimental research from general education, special education, and business, where much of the current findings stem from research on Positive Behavioral Intervention Supports (PBIS).  Research is inconclusive but suggests that systems coaches may use similar practices as teacher coaches. | Research is inconclusive. Systems coaches focus on improving team knowledge (e.g., principles of implementation science) and team processes (e.g., team’s use of data to address school-wide issues) rather than individual teachers’ practice. Systems coaches also may conduct trainings to improve team knowledge and skills. | Face to face at the school, district, regional, and/or state level during team meetings  OR  Virtually (e.g., coach remotely meets with the team and uses technology to provide performance feedback)  OR  A combination of face-to-face and virtual meetings (e.g., meeting face to face or virtually to provide performance feedback and apply alliance-building strategies) | One-on-one between a coach and a member of a team responsible for leading implementation efforts  OR  A coach and all core team members responsible for leading implementation efforts  OR  Small or large teams of teachers and leaders with a coach |  | Some findings suggest:   * improved knowledge among teams to guide systems-level change * teams may demonstrate improved use of data to solve systems-level problems |
| **Mentoring**  Extensive experimental and qualitative research from various fields (e.g., special education, general education, and school psychology; in teacher-induction research, mentor teachers work with preservice teachers during the student teaching phase and may use coaching practices.)  Research is inconclusive but suggests that mentor and mentee convene regularly to discuss teaching practice, where mentor provides emotional support to mentee. | Research is inconclusive. Some mentoring research suggests that the mentor may use effective coaching practices to improve mentee practice, particularly performance feedback. | Face to face, within the classroom while the mentee instructs learners or during non-instructional time  OR  Virtually (e.g., mentor remotely meets with the mentee and uses technology to observe mentee, provide performance feedback, and apply alliance-building strategies)  OR  A combination of face-to-face and virtual meetings (e.g., meeting face to face or virtually to provide performance feedback and apply alliance-building strategies) | One-on-one between a mentee and a mentor |  | When mentor applies coaching practices, mentee practice may improve.  Research suggests:   * mentoring may influence staff retention and self-efficacy as well as reduce feelings of isolation, particularly among beginning teachers * mentor knowledge and satisfaction with job may improve (more so than mentee knowledge and job satisfaction) |
| **Training**  Extensive qualitative and experimental research from various fields (e.g., special education, general education, school psychology) | Outside experts provide teachers with multiple opportunities to observe the use of the practice, be observed using the practice, examine student work, apply new knowledge to existing teaching repertoire, and plan how to integrate new knowledge/skill into their unique classroom contexts. | Sessions are face to face and typically facilitated by outside experts for teachers with similar instructional contexts (e.g., literacy, mathematics, behavior) or needs (e.g., how to use data for decision making). | Sessions are extensive (i.e., 14 hours or more) and often occur over the course of a year or more. | <http://rt3region7.ncdpi.wikispaces.net/file/view/Eval%20PD%20Article-Guskey.pdf/461738692/Eval%20PD%20Article-Guskey.pdf> | Improved teacher knowledge  Improved teacher skill in the training setting |
| **Professional Learning Communities (PLCs)**  Primarily qualitative research from general education and business. One experimental study from education.  Research is inconclusive but suggests that PLCs should build shared values and incorporate opportunities for collaboration, including reflective dialogue among teachers. | Research is inconclusive. One experimental study involved four steps: (1) debrief research discussed at prior meeting; (2) discuss research on a new topic, referring to articles assigned to read on the topic; (3) discuss how research can be applied in teaching practice, referring to common teaching materials and identifying specific ways in which the curriculum can be adjusted to include research-based teaching practices; and (4) plan a lesson using research with a facilitator and other teachers, identifying specific changes. | Primarily face to face | Teams of teachers led by a facilitator |  | A small body of qualitative research suggests that teachers report changes in practice and improved student learning.  One study suggests teacher knowledge and practice may improve if a four-step procedure is followed. Use of this procedure also may yield improved student learning. |

a If research is inconclusive, common features seen in research are described. These common features may or may not lead to expected outcomes because additional research is needed to define the effective practices of the support model.

b Self-reports not included. If blank, tools do not exist or are unavailable for public use.

c Presence of common features may not lead to expected outcomes whereas defining features are expected to lead to desired outcomes.

## Resources and Scholarly Articles

### One-on-one Teacher Coaching

* *Effective Coaching: Improving Teacher Practice and Outcomes for All Learners* (NCSI Coaching Brief) (<https://ncsi-library.wested.org/resources/57>)
* MyTeachingPartnerTM (<http://curry.virginia.edu/research/centers/castl/mtp>)
* Trainers and Coaches (<http://www.pyramidmodel.org/resources/trainers-coaches/>)
* Buysse, V., & Wesley, P. W. (2005). *Consultation in early childhood settings*. Brookes Pub.
* [J. Frederick West](http://journals.sagepub.com/author/West%2C+J+Frederick)
* Snyder, P., Hemmeter, M. L., Meeker, K. A., Kinder, K., Pasia, C., & McLaughlin, T. (2012). Characterizing key features of the early childhood professional development literature. *Infants & Young Children*, *25*(3), 188-212.

### Team Teacher Coaching

* Early, D. M., Maxwell, K. L., Ponder, B. D., & Pan, Y. (2017). Improving teacher-child interactions: A randomized controlled trial of Making the Most of Classroom Interactions and My Teaching Partner professional development models. *Early Childhood Research Quarterly*, *38*, 57–70.
* Early, D. M., LaForett, D. R., & Kraus, S. (2017). Evaluation findings from Year 2 of Georgia’s CLASS-Related Professional Development Evaluation Project.
* Teachstone Resources (<http://teachstone.com/resources/>)

### Systems Coaching

* Coaching System Change: What? Me! (<https://ncsi-library.wested.org/resources/116>)
* Newton, J. S., Algozzine, B., Algozzine, K., Horner, R. H., & Todd, A. W. (2011). Building local capacity for training and coaching data-based problem solving with positive behavior intervention and support teams. *Journal of Applied School Psychology*, *27*(3), 228–245.
* Metz, A., Louison, L., Ward, C., & Burke, K.(2017). Global implementation specialist practice profile: Skills and competencies for implementation practitioners. Manuscript in preparation.

### Mentoring

* Fletcher, S., & Mullen, C. A. (Eds.). (2012). *Sage handbook of mentoring and coaching in education*. Thousand Oaks, CA: Sage.
* White, M., & Mason, C. Y. (2006). Components of a successful mentoring program for beginning special education teachers: Perspectives from new teachers and mentors. Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children, 29(3), 191–201.

### Training

* Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, *38*(4), 915–945.
* Yoon, K. S., Duncan, T., Lee, S. W. Y., Scarloss, B., & Shapley, K. L. (2007). *Reviewing the evidence on how teacher* professional development affects student achievement (Issues & Answers. REL 2007-No. 033). Washington, DC: Regional Educational Laboratory Southwest (NJ1).

### Professional Learning Communities (PLCs)

* 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*(1), 80–91.
* Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change*, *7*(4), 221–258.
* Gersten, R., Dimino, J., Jayanthi, M., Kim, J. S., & Santoro, L. E. (2010). Teacher study group: Impact of the professional development model on reading instruction and student outcomes in first grade classrooms. *American Educational Research Journal*, *47*(3), 694–739.

## Discussion Guide

|  | **Column A: Individual Reflection** | **Column B: Team Discussion and Consensus** |
| --- | --- | --- |
| **EXPECTED OUTCOMES** | What is the expected **outcome or goal** of the support model (e.g., improve teacher practice, improve teacher knowledge, improve teams’ knowledge of systems change)? There may be more than one goal.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Do we agree as a team about the goal(s)?  What are our areas of agreement and disagreement?  How can we come to agreement about the goal(s)?  The agreed-upon goal(s) for our model of support are\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **EFFECTIVE PRACTICES** | What are the **defining features** of the model, according to research?  If research does *not* clearly indicate what features must be present to ensure the model is effective, what practices *seem* to be recommended? | Do we agree as a team about what our support model must include, according to research?  What are our areas of agreement and disagreement?  How can we come to agreement about the practices of our support model?  The agreed-upon practices for our model of support are\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **FORMAT AND VENUE** | What is the **format of the support model** (e.g., face-to-face, virtual, or both)? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  In what **venue** is the support model used (e.g., in the classroom, at team meetings)? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Do we agree as a team on the format and venue?  What are our areas of agreement and disagreement?  How can we come to agreement about the venue and format of our support model?  What are some next steps to take? |
| **FIDELITY** | Do **fidelity measures** provide data on the degree to which the support model consistently aligns to recommendations included within the matrix?  YES NO SOMEWHAT (Circle one.)  Does the current use of the support model align to the research recommendations included within the matrix?  YES NO SOMEWHAT (Circle one.)  What do data specifically indicate about alignment of the support model to research?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | If fidelity data are not collected:  How can we collect this information?  How will we use this information?  What are next steps to take?  Do we agree as a team about the next steps?  If fidelity data are collected:  Do we agree as a team about what fidelity data mean?  What are our areas of agreement and disagreement?  How can we come to agreement about the meaning of fidelity data?  What are some next steps to take? |
| **REFINING THE LOGIC OF THE SUPPORT MODEL** | Use the sentence frame below to check the logic undergirding the current support model:  If \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_consists of the effective practices \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the \_\_\_(venue)\_\_\_\_\_\_\_\_\_\_\_\_\_\_among \_\_\_\_\_\_\_\_\_\_\_\_\_\_(format)\_\_\_\_\_\_\_\_\_\_, then the goal of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_can/cannot be attained.  ***Examples:***   * If coaching consists of ongoing cycles of observation, modeling, providing performance feedback, and using alliance-building strategies in the classroom setting between a teacher and a coach, then the goal of improved teacher practice and improved learner outcomes can be attained. * If coaching consists of alliance-building strategies in a team meeting between a group of teachers and a coach, then the goal of improved teacher practice and improved learner outcomes cannot be attained. | Does the logic behind our support model suggest we will attain the expected outcome? Why or why not?  How can we increase the likelihood of attaining the expected outcome? |
| **NEXT STEPS TO ATTAIN GOAL** | What next steps are needed to ensure that the support model leads to the attainment of the goal? | Do we agree as a team on the next steps?  What are our areas of agreement and disagreement?  How can we come to agreement about next steps? |
| **SUSTAINABILITY** | What can we do to sustain the use of our support method? Consider the resources that are needed, including time, personnel, funding, etc. | Do we agree as a team on the steps needed to sustain our support model?  What are our areas of agreement and disagreement?  How can we come to agreement about sustaining our support model? |