State Knowledge Utilization Spotlight: Maryland

Challenge: How do we support the selection and implementation of evidence-based practices in mathematics?

The selection of evidence-based practices (EBPs) in mathematics is a critical step toward improving mathematics outcomes for students with disabilities. This state spotlight presents how the Maryland State Department of Education uses the TAP-IT (Team, Analyze, Plan, Implement, and Track) process[1] coupled with systems coaching to support the implementation of selected EBPs with fidelity. Although all steps of the TAP-IT process are critical, this spotlight describes how the Maryland State Department of Education Division of Special Education/Early Intervention Services uses the ***plan*** and ***implement*** stages of TAP-IT to assist local school systems (LSSs), instructional coaches, and educators with implementation.

State Context

Public School Facts: Maryland

Districts: 24
Schools: 1,447
Students: 875,000
Students with Individualized Education Programs: 90,000

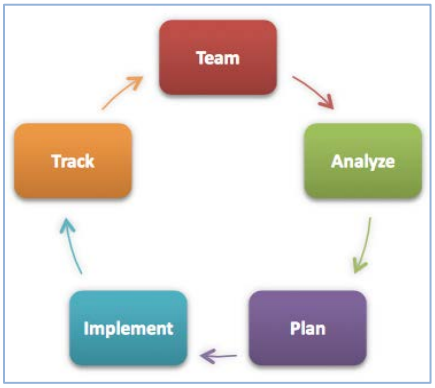
The Maryland State Department of Education Division of Special Education/Early Intervention Services, led by assistant state superintendent Marcella Franczkowski, has developed a strategic plan to narrow opportunity and achievement gaps for children with disabilities from birth through age 21. *Moving Maryland Forward: Sharpen the Focus for 2020* embeds the work of Maryland's State Systemic Improvement Plan (SSIP) and lays the foundation for strategic implementation of EBPs. Maryland's Part B State Identified Measurable Results (SiMR) focuses on increasing third- through fifth-grade mathematics proficiency of students with disabilities. In 2013, the average mathematics achievement gap for students with disabilities in third grade was greater than 38 percentage points and increased to 46 percentage points in eighth grade. These data indicated that Maryland had to change not only classroom practice but also system practice so that EBPs could be implemented with fidelity. To impact system practices around the implementation of EBPs, Maryland State Department of Education adopted the TAP-IT process and systems coaching as combined strategies to be used with the five local school systems participating in the Part B SSIP.

[1] Mainzer, K. L., & Stein, S. (2013). *Boundless learning foundations: A review of the literature on data-informed decision making.* Reston, VA: Exceptional Innovations, Inc.

Strategies for Success

Evidence-Based Decision Making Process

TAP-IT is a data-informed decision making process that is different from traditional Plan-Do-Study-Act cycles in that it infuses the principles of high-performing teams into the continuous improvement process. The literature tells us that when implementation is facilitated through an implementation team, innovations can be implemented at 80% fidelity during a 3-year period. Research shows that if implementation is not facilitated by an implementation team, then it will take 17 years to implement a new practice at 14% fidelity.[2]



The TAP-IT process improves the functioning of implementation teams through high-performance teaming principles. State and local implementation teams use implementation science frameworks and the TAP-IT process to support stage-based implementation of EBPs in mathematics. TAP-IT uses relevant data sources and specific protocols to *(**Team**)* develop a high-performing implementation team, *(**Analyze**)* analyze relevant data, *(**Plan**)* select appropriate instructional practices and develop an action plan, *(**Implement**)* implement the EBPs and monitor the fidelity of implementation, and *(**Track**)* determine the effectiveness of selected EBPs and/or interventions in producing positive outcomes for students. A digital portfolio has been developed as a tool for teams to use to guide them through the TAP-IT process, store documents developed by implementation teams, and collect implementation fidelity data.

Systems Coaching

A state liaison, known as a systems coach, collaborates with the local implementation team to ensure that the team is using the TAP-IT process with fidelity through the lens of implementation science. They provide input and feedback through the Digital Portfolio and offer technical assistance (TA) to local teams on an ongoing basis.

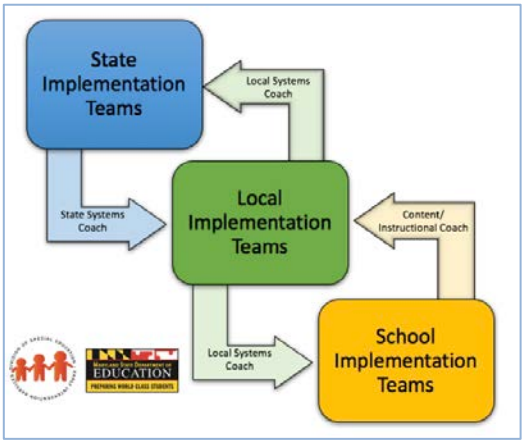
Systems coaches have the skills to build the capacity of others to effectively use the science and practice of implementation. LSSs have identified two systems coaches per district to serve as the liaison between the state systems coaches and the local implementation teams. They serve as the entry point to the district for state and

[2] Fixsen, D. L., Naomm, S. F., Blasé, K. A., & Friedman, R. M. (2005). *Implementation research: A synthesis of the literature.* Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, National Implementation Research Network.

local collaboration on the SSIP. State and local systems coaches are trained in the TAP-IT process and Digital Portfolio and focus on implementation efforts. In Maryland, systems coaches at the state and local level work with leadership and implementation teams to initiate, guide, and sustain change efforts.

For this challenge question, the following stages of the TAP-IT process are highlighted:

- ***Plan.*** Based on data analysis, the team examines solutions to address challenges and selects EBPs support the system and student needs. Team members create an action plan including the activities, team members responsible, timeline, and resources needed. The team develops a data collection plan to measure implementation fidelity and student progress.
- ***Implement.*** The team collaborates with school leadership and the instructional coaches, who work with teachers to implement the EBPs selected. During this stage, the team implements the action plans, collects and analyzes formative data, and uses the communication and feedback loops to make adjustments to plans.



Through the *Plan* and *Implement* stages, the systems coaches and the instructional coaches play a pivotal role. The state systems coaches provide TA to local systems coaches who facilitate the work of the implementation team, including the instructional coaches as team members. Instructional coaches are members of the LSS and school level teams and serve as a communication and feedback loop between the schools and the district.

During planning, both the systems coach and the instructional coach help the teacher (a) identify the intervention and/or EBPs to be implemented and (b) develop a plan and procedures for progress monitoring. As teachers begin implementation, the instructional coach helps them to maintain fidelity of implementation and assists with instructional practices as needed.

During implementation, instructional coaches provide job-embedded professional development for teachers, collect implementation fidelity data, and communicate implementation barriers to the LSS implementation team. The local systems coaches support the instructional coaches and meet regularly with them to discuss additional resources needed, implementation fidelity, and student progress.

In Action

Worcester County Public Schools selected the Main Lesson-Menu Lesson Instructional Framework[3] as the EBP to improve mathematics outcomes for students with disabilities. After analyzing implementation data within the TAP-IT process, the LSS Implementation Team identified that teachers were not implementing the *Closure* portion of the instructional framework on a consistent basis. Therefore, the team set a goal and developed an action plan. As a next step, instructional coaches planned professional development and created tools/resources for teachers to use during their lessons to increase the percentage of teachers implementing *Closure* with fidelity. The LSS Implementation Team also developed a data collection plan to monitor *Closure* fidelity over a 4-week period. At the end of this TAP-IT cycle, the team had met their goal to increase the fidelity of *Closure,* which increased the teachers' overall fidelity of implementation of the EBP that the LSS selected.

Considerations for States Facing Similar Challenges

- Identify the infrastructure changes and consider the use of systems coaching to guide the development of a plan for how to select, implement, and monitor the implementation of EBPs.
- Adopt a data-informed team-based approach, such as the TAP-IT process, to improve results for students with disabilities.

Available Resources

- The National Center for Systemic Improvement (NCSI), Technical Assistance State Facilitators (find your state on the map at https://ncsi-resources.wested.org/)
- Maryland Learning Links: https://marylandlearninglinks.org/resource/tap-it-data-informed-decisions/
- NCSI Knowledge Use Team Technical Assistance Support (contact Jill Pentimonti at jpentimonti@air.org)

About this resource: This resource was developed by members of the NCSI Knowledge Utilization Service Area Team, including Jill Pentimonti (AIR), Kathleen Pfannenstiel (AIR), and Melodee Walker (AIR), and in collaboration with Marcella Franczkowski, Assistant State Superintendent of Special Education/Early Intervention Services; Marilyn Muirhead, SPDG Coordinator, Maryland State Department of Education; and Jennifer Dale, SSIP Coordinator, Maryland State Department of Education. The content was developed under cooperative agreement number #H326R140006 (NCSI) from the Office of Special Education Programs, U.S. Department of Education. The opinions expressed herein do not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the federal government. Project officers are Perry Williams and Shedeh Hajghassemali.

[3] Tapper, J. (2012). *Solving for why. Understanding, assessing, and teaching students who struggle with math.* Sausalito, CA: Scholastic.