PBIS Forum 15 Practice Brief:  
Team-Initiated Problem Solving (TIPS)

Operational definition

Team-Initiated Problem Solving (TIPS) is a problem-solving framework used during meetings (e.g., PBIS, RTI, MTSS) focused on data-based decision making to improve student outcomes. TIPS is applicable to varied data sources (e.g., DIBELS, AIMSweb, SWIS), content areas (e.g., academic, behavior), and levels of application (e.g., school, district, state).

Rationale

It is common for schools to have “problem-solving teams” focused on addressing student academic and behavior challenges. Some teams use general problem-solving models (e.g., problem identification, problem analysis, plan development, and plan evaluation) to lead them to problem resolution. Unfortunately, research documents that, although school teams indicate they are adhering to problem-solving guidelines, they are often missing critical components, thus decreasing the chances of improving student outcomes (Flugum & Reschly, 1994; McDougal et al., 2009; Telzrow et al., 2009). Barriers to conducting efficient problem solving meetings have been identified to include: limited time scheduled for meetings, gaps in foundations (e.g., location, team members, procedures, efficiency of meeting), an unfocused or unidentified purpose for meeting, and inadequate training and support to implement effective and efficient problem solving (Nellis, 2012). Team-Initiated Problem Solving (TIPS) is a framework that addresses these barriers by breaking down problem solving into six critical steps to guide teams through a data-based decision making process that leads to desired outcomes. TIPS also infuses critical elements of effective and efficient meetings (e.g., consistent procedures, team member roles, meeting minutes prompt the problem solving process). TIPS is a generic problem solving model that provides structure to any type of meeting. The TIPS model includes focus on meeting foundations guided by a structured Meeting Minutes form and a six-step problem solving process.
Procedures

The TIPS framework includes meeting foundations, meeting minutes, and the problem-solving process for use during team meetings designated for problem solving that were drawn from a rigorous review of research on problem solving and team processes in schools.

Meeting Foundations
Effective teams establish foundations for their meetings:

• Meeting schedule is created
• Members attend meetings
• Projected agenda and meeting minutes are reviewed and updated during meetings
• Team roles are clearly defined and assigned to facilitator, data analyst, minute taker, and team member with specific responsibilities for before, during and after meetings
• Solutions identified by team can be approved for implementation during the meeting

Meeting Minutes
Effective teams document critical features of their meetings.

• TIPS Meeting Minutes are used to document meeting foundations, guide meetings through problem-solving steps, and record decisions made during the meeting
• Previous problems are reviewed with data to indicate their level of implementation (fidelity) and current levels compared to goal (outcome data) with results documented on meeting minutes
• Data are current, accurate, accessible, projected, and formatted to evaluate progress and answer potential questions

Problem Solving Process
Effective teams follow a data-based decision-making process:

• Identify a problem with precision
  o Teams identify who, what, when, where, why and current level for every problem that requires a solution
• Identify goal for change
  o Teams set a goal that defines levels at which the problem is no longer a problem
• Identify solution and create implementation plan with contextual fit
  o Teams brainstorm solutions and decide what they are going to do to bring about desired change (meet goal)
• Implement solution with high integrity
  o Teams implement and use data to determine if they did what they said they would do
• Monitor impact of solution and compare against goal
  o Teams use outcome data to determine if the solution is having the desired impact on the outcome.
• Make summative evaluation decisions
  o Teams use fidelity and outcome data to determine what to do next (continue/modify/stop plan, or continue through problem solving process again)
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Specific Implementation Examples/Research Supporting TIPS

In a randomized control trial, Newton, Horner, Algozzine, Todd, and Algozzine (2012) evaluated the effects of TIPS training on 34 PBIS school teams’ implementation of TIPS. Teams and their coach in treatment were trained in TIPS and the coach provided follow-up technical assistance and environmental supports. Wait-list (control group) teams did not receive TIPS training. Researchers observed PBIS team meetings using the Decision Observation, Recording, and Analysis (DORA) instrument (Algozzine, Horner, Todd, Newton, Algozzine, & Cusumano, 2015). Results indicated trained teams demonstrated higher levels of problem solving behaviors than control teams. This research demonstrated that school teams can be trained to problem solve, which led to a new question, what impact does problem solving have on student outcomes?

To address this question, Horner, Algozzine, Todd, Algozzine, Cusumano, and Preston (in preparation) conducted a replication study with 38 school PBIS teams using a randomized control trial to evaluate the effects of a two-part intervention (TIPS training plus two coached meetings) on team implementation of TIPS and student outcomes. During the first wave, treatment teams and coaches received the TIPS Intervention (i.e., a full day of TIPS team training, a full day of coaches training, and two coached meetings following the team training). Wait-list teams did not receive any training or coaching in TIPS during this phase. Researchers observed PBIS team meetings using the DORA instrument before and after intervention. Results indicated treatment teams had higher problem solving scores after TIPS Intervention than wait-list teams. Furthermore, treatment teams that implemented the solution with full or partial fidelity reported positive student outcomes. During the next phase the following year, wait-list teams received the TIPS Intervention. Results from this study were similar to results in the first study. Overall, this research indicates that teams can be trained to improve problem solving and, more importantly, improved problem solving has a positive impact on student outcomes.

Lessons Learned for Improvement of Practice

- Regular attendance and roles being assigned is critical so members know what is expected
- Predictability of meetings is important; members must know when tasks are due and next meetings are scheduled
- Meeting agendas must be displayed and can be used to keep discussion on target
- Meeting Minutes must be projected, used to guide the meeting, prompt steps for problem solving, and record decisions
- Teams must be taught how data drives each step in problem solving
- Problems must be identified with precision before discussing solutions
- Links between solutions implemented and positive student outcomes should be highlighted
- Emphasize attention to how differences in precision elements lead to different sets of solution options

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• Make teams aware that it is more effective to implement a few targeted and specific solutions rather than too many that overextend resources and cannot be maintained  
• Teams must be taught about the concept of fidelity data, how it is non-evaluative, and easy ways to gather it  
• Teams should use fidelity data as a component of evaluating outcomes of solution implementation  
• Teams must be taught to review all problems until resolved and goal is met

Frequently asked questions

Q: Where do I start if I want to learn more about TIPS?  
A: Visit the TIPS website www.TIPS2info.blogspot.com to learn more information about TIPS

Q: What resources are available on TIPS?  
A: Meeting Minute guide, overview videos, Readiness for Training Checklist, TIPS Fidelity Checklist, skill building resources, sample meeting video, take home practice tasks, and much more

Q: Is TIPS only compatible with PBIS teams?  
A: No. TIPS is a generic problem-solving process that can be used with any problem-solving team using quantitative data to identify and solve problems. TIPS can be used with RTI teams, MTSS teams, student assistance teams, state/district teams, and any problem-solving team

Q: Do schools have to use SWIS for TIPS?  
A: Any type of database that can analyze student, class, grade level data by the precision problem statement elements (who, what, when, where, why) will work. TIPS research was funded for schools using SWIS. We have found TIPS to be adaptable to fit any database

Q: How long is TIPS training?  
A: Full TIPS training includes one day devoted to teams learning and using TIPS, one day dedicated to coaches coaching TIPS, and one day building training skills to train teams and coaches to use TIPS

Q: What types of TIPS trainings are available?  
A: Team, coaches, and trainer trainings are available for coaches and trainers. Trainers are trained in all three areas, coaches are provided TIPS team training and coaching through TIPS

Q: Who do we contact if our district is interested in TIPS training?  
A: Email us at TIPS2Grant@gmail.com
Q: Do schools have to use coaches?
A: Yes. In order to build fluency and sustain TIPS, coaches are required to provide scaffolded support for long-term implementation.

Q: Does TIPS only work at the Tier 1 level?
A: No. TIPS is a generic problem solving process that can be used when discussing academic and behavior problems across all Tiers of support.

Q: Does TIPS only work with school teams?
A: No. TIPS is a generic problem solving process that can be used by state and district teams to problem solve administrative problems (e.g., new initiative buy-in, disproportionality, graduation rates, attendance).

Q: I’m interested in TIPS. Now what?
A: Review the TIPS Training Checklist (www.TIPS2info.blogspot.com) to determine if your district is ready for TIPS and steps for starting the TIPS journey.

TIPS Examples
The following examples include Meeting Minute notes from discussing the problem with precision, setting the goal, identifying solution actions, and identifying fidelity and outcome data. The next steps would be to implement the solution with high integrity, monitor impact of solution, and meet to make summative evaluation decisions and decide what to do next.

**Student Level Example - Elementary**

<table>
<thead>
<tr>
<th>Precise Problem Statement</th>
<th>Goal and Timeline</th>
<th>Solution Actions</th>
<th>Identify Fidelity and Outcome Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eight 5th grade students scored in the strategic range on fall oral reading fluency benchmark, due to poor phonics skills (high error rates).</td>
<td>All students will read at least 127 wpm by Spring benchmark.</td>
<td>All students will be given the CORE Phonics Survey and placement tests for explicit instruction phonics program by</td>
<td>What <strong>fidelity</strong> data will we collect? What? When? Who?</td>
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<tr>
<td><strong>Current Levels:</strong></td>
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<tr>
<td>Oral Reading Fluency scores: Phil-90 cwpm /15 errors</td>
<td>What? When? Where? Who? Why? How Often?</td>
<td>Ms. James (reading specialist) by next Wednesday. Students will be provided small group reading instruction at their level, 30 minutes 5 days a week with Ms. James starting next Friday.</td>
<td>Attendance collected during small group reading instruction by Ms. James</td>
</tr>
<tr>
<td>Fernando- 99 cwpm /12 errors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quinn- 89 cwpm /19 errors</td>
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<tr>
<td>Demarius- 98 cwpm /21 errors</td>
<td></td>
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<tr>
<td>Emma- 91 cwpm /15 errors</td>
<td></td>
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<tr>
<td>Aiden- 88 cwpm /18 errors</td>
<td></td>
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</tr>
<tr>
<td>Diana- 103 cwpm /24 errors</td>
<td></td>
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<tr>
<td>Veronica- 96 cwpm /17 errors</td>
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### Student Level Example- Secondary

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<tr>
<td>Ralph, a senior, is failing two courses, has poor attendance, and is not responding to CICO with his English teacher (Tier 2 intervention). This is thought to be due to Ralph not having input/buy-in into his education and lack of a plan before/after graduation.</td>
<td>What? When? Where? Who? Why? How Often?</td>
<td>Ralph will attend all classes 90% of the time within one month. Ralph will increase/maintain passing grades in all classes (&gt;70%) by next quarter. Ralph will graduate within</td>
<td>Ralph will begin Tier 3 RENEW intervention with his chosen team (English teacher, assistant principal, counselor) where Ralph will take on responsibility to collaborate with team to create plans for before/after graduation. Meeting-Tuesdays at 3:00.</td>
</tr>
<tr>
<td>Current Levels: CICO levels- decreasing trend CICO levels- decreasing trend Attendance/Grade in class: Physics-54%/47%</td>
<td></td>
<td></td>
<td>What outcome data will we collect? What? When? Who? Counselor will email RENEW plan to facilitator by Wednesday after meeting. Data will be reviewed at next meeting.</td>
</tr>
</tbody>
</table>

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<tr>
<td>English - 91%/82% World History - 35%/74% Algebra 2 - 47%/63%</td>
<td>two semesters.</td>
<td></td>
<td>weekly until end of semester.</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Counselor will complete checklist of courses for graduation, reviewed each quarter.</td>
</tr>
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School Level Example

<table>
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| Marion High School RTI team has low attendance at meetings and does not consistently use meeting minutes during problem solving meetings. This is due to lack of support after training. | Team will have 80% attendance rate at remaining problem solving meetings beginning next month (or if needed reschedule meeting). | Team will review meeting foundations video on TIPS website, email facilitator after viewing video by Friday next week. | **What fidelity data will we collect?**  
*What? When? Who?*
Facilitator will collect emails from team on video and date/time of meeting.  
Coach will check off meeting with minute takers in task list once completed. |
| **Current Levels:**  
Observation data-  
Only 20% of team arrives on time  
Meeting minutes used during 20% of meetings. | Minute taker and backup will take minutes for 100% of meetings. | Team will confirm date and time work with their schedules by Friday next week. | **What outcome data will we collect?**  
*What? When? Who?*  
Coach will meet with minute takers to review role responsibilities and meeting minute guide by Friday next week. |
| | | | Coach will collect data on attendance and use of meeting minutes at problem solving meetings. Coach will use TIPS FC and/or TFI. |

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**District Level Example**

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<tbody>
<tr>
<td>Hinson School District (20 schools) are ineffective and inefficient at problem solving during MTSS meetings. This is due to the lack of structure within MTSS meetings.</td>
<td>In HSD, 100% of schools will be trained in TIPS by the beginning of next school year.</td>
<td>HSD leaders and MTSS coordinator will designate TIPS trainers and coaches and all will attend TIPS trainings within two months. HSD trainers will train 50% of schools in TIPS within six months. HSD trainers will train remaining 50% of schools will be trained within one year (before the start of next school year).</td>
<td>What fidelity data will we collect? What? When? Who?</td>
</tr>
<tr>
<td>Current Levels:</td>
<td></td>
<td></td>
<td>HSD district calendar and task list- HSD MTSS coordinator TIPS Fidelity of Training Checklist, Coaches Fidelity Checklists</td>
</tr>
<tr>
<td>Audit of problem solving meeting components: 10% of schools use meeting minutes 10% meet regularly 5% use general problem solving process 0% of schools trained in TIPS</td>
<td></td>
<td></td>
<td>What outcome data will we collect? What? When? Who?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Attendance at TIPS trainings for coaches and trainers Attendance at TIPS trainings for schools</td>
</tr>
</tbody>
</table>

### Additional Resources

For more handouts, videos, and other resources on TIPS visit:
- [http://www.TISP2info.blogspot.com](http://www.TISP2info.blogspot.com)
- [http://www.pbis.org/training/tips](http://www.pbis.org/training/tips)

For access to the TIPS Resource Matrix:
- [https://www.dropbox.com/s/gunv6u4xlx4ld8m/TIPS%20Resources%20Handout%208.20.15.docx?dl=0](https://www.dropbox.com/s/gunv6u4xlx4ld8m/TIPS%20Resources%20Handout%208.20.15.docx?dl=0)

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