Team-Initiated Problem Solving (TIPS) Brief Overview

Presented by:

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Session Objectives

- Provide a brief overview of the TIPS II model
- Current Research
- TIPS Fidelity of Implementation Checklist
- TIPS Team Training Readiness
- Provide examples of using the TIPS II model with SWIS & Literacy Data

Improving Decision-Making

From PROBLEM TO SOLUTION

Decisions are more likely to be effective and efficient when they are based on data. Quality of decision-making depends most on the first step (defining the problem to be solved).

Main Ideas

Data help us ask the right question; they do not provide the answers. Use data to identify problems, refine the questions that lead to solutions.
More Main Ideas

- The process a team uses is important
- Agenda, old business, new business, action plan for decisions
- What happens BEFORE a meeting
- What happens DURING a meeting
- What happens AFTER a meeting

What do we need?
- A clear model with steps for problem solving
- Access to the right information at the right time in the right format
- A formal process that a group of people can use to build and implement solutions.

TIPS Journey

In the beginning, meetings ended with a quick glance of the data... data were used to admire the problem... or not used at all

- **TIPS I: 2008-2012**
  - IES funded grant for establishing the TIPS Model and Curriculum
  - Research results:
    - Using the TIPS model increases fidelity of implementation of meeting foundations & problem solving
    - Impact on teams
    - Provided research-based problem solving for second generation of TIPS
  - Development of a research level observation tool for measuring TIPS fidelity of implementation
    - DORA: Decision, Observation, Recording and Analysis Instrument

- **TIPS II: 2012-2016**
  - IES funded grant to determine if implementation of the TIPS model has an impact on student outcomes
  - Research includes:
    - Technical adequacy (validity and reliability) of the DORA Instrument
    - Randomized Control Trial Study
    - 8 elementary schools using SWIS (Or: 2, NC: 2)
    - Currently collecting baseline data
    - August 2013: Immediate Group
    - August 2014: Wait List Group

Presented by: Dale Cusumano, Ph.D.
TIPS Overview for NCSPA 2012

Presented by: Dale Cusumano, Ph.D.
Meeting Foundations Elements

Four features of effective meetings
1. Predictability
2. Participation
3. Accountability
4. Communication

Define roles & responsibilities
- Facilitator, Minute Taker, Data Analyst

Use electronic meeting minutes format

Problem-Solving Meeting Foundations

Structure of meetings lays foundation for efficiency & effectiveness

Predictability
- Defined roles, responsibilities and expectations for the meeting
- Start & end on time, if meeting needs to be extended, get agreement from all members
- Agenda is used to guide meeting topics
- Data are reviewed in first 5 minutes of the meeting
- Next meeting is scheduled

Participation
- 75% of team members present & engaged in topic(s)
- Decision makers are present when needed
What makes a successful meeting?

**Accountability**
- Facilitator, Minute Taker & Data Analyst come prepared for meeting &
  complete their responsibilities during the meeting
- System is used for monitoring progress of implemented solutions (review
  previous meeting minutes, goal setting)
- System is used for documenting decisions
- Efforts are making a difference in the lives of children/students.

**Communication**
- All regular team members (absent or present) get access to the
  meeting minutes within 24 hours of the meeting
- Team member support to practice team meeting norms/agreements

Define Roles & Responsibilities for Effective Meetings

**Core roles**
- Facilitator
- Minute taker
- Data analyst
- Active team member
- Administrator

**Backup for each role**

**Facilitator Responsibilities**
- Before meeting, provides agenda items to Minute Taker
  - Usually agenda items from Facilitator
  - Provides TIPS Meeting Minutes agenda form, including content from Data
    Analyst’s Report, as appropriate
  - Provides copies of the TIPS Meeting Minutes form for each team member, or is
    prepared to present form via LCD
- At meeting, asks for clarification of tasks/decisions to be recorded on
  TIPS Meeting Minutes form, as necessary
  - Uses computer & word processor
  - Saves file
  - Ability to listen to a discussion and paraphrase critical information in
    written form
  - Fluent with meeting minutes form
  - Is active participant in meeting
- After meeting, disseminates copy of completed TIPS Meeting Minutes form to all
  team members within 24 hours

**Minute Taker Responsibilities**
- Before meeting
  - Prints agenda items from Facilitator
  - Prepares TIPS Meeting Minutes agenda form, including content from Data
    Analyst’s Report, as appropriate
  - Prints copies of the TIPS Meeting Minutes form for each team member, or is
    prepared to present form via LCD
- At meeting, asks for clarification of tasks/decisions to be recorded on
  TIPS Meeting Minutes form, as necessary
  - Uses computer & word processor
  - Saves file
  - Ability to listen to a discussion and paraphrase critical information in
    written form
  - Fluent with meeting minutes form
  - Is active participant in meeting
- After meeting, disseminates copy of completed TIPS Meeting Minutes form to all
  team members within 24 hours

**Data Analyst Responsibilities**
- Before meeting
  - Reviews data to describe potential new problems with precision
  - Provides data (e.g., Summary and Drill Down Reports) concerning the
    frequency/rate of precisely-defined problems
  - Provides updates on precisely-defined problems (i.e., precise problem
    statement, goal & timeline, frequency/rate for most recently-completed
    calendar month, direction of change in rate since last report, relationship
    of change to goal)
  - Distributes Data Analyst’s Report to team members
  - Asks Facilitator to add potential new problems to agenda for meeting
- At meeting
  - Leads discussion of potential new problems
  - Responds to team members’ questions concerning content of the Data
    Analyst’s Report; responds at request to produce additional data on request (e.g.,
    additional Custom Reports)
  - Is active participant in meeting

Presented by: Dale Cusumano, Ph.D.
One goal is to be able to walk into any meeting, with no prior knowledge of team/context, find & review minutes from previous meeting, & be ready to take minutes or facilitate ‘today’s’ meeting…within 5 minutes of reviewing the previous meeting minutes

Do you have at least one team that you work with that you can do that?

Team Member Responsibilities

- Active meeting, recommends agenda items to Facilitator
- At meeting, responds to agenda items
- Analyzes/interprets data; determines whether a new problem exists
- Ensures new problems are defined with precision (What, Who, Where, When, Why) and accompanied by a Goal and Timeline
- Discusses/selects solutions for new problems
- For problems with existing solution actions
- Reports on implementation status (Not Started? Partially implemented? Implemented with fidelity? Stopped?)
- Suggests how implementation of solution actions could be improved
- Analyses/interprets data to determine whether implemented solution actions are working (i.e., reducing the rate/frequency of the targeted problem to Goal level)?
- Is active participant in meeting
- Willingness to listen and consider all perspectives
- Use sense of humor
- Mutual respect

Implement Solution with High Integrity

- Identify Problem with Precision
- Identify Goal for Change
- Identify Cause for Change
- Identify Change and Create Implementation Plan with Consensus

Team-Initiated Problem Solving II (TIPS II) Model

Meeting Foundation

- Identify Problem with Precision
- Make Outcome Evaluation Decision
- Identify Change and Create Implementation Plan with Consensus

Collect and Use Data

- Identify Solution and Create Implementation Plan with Consensus
- Monitor Impact of Solution and Compare Against Goal
- Make Summative Evaluation Decision

Section 1: Status Report on SW Average Referrals per day per month

Section 2: Status Report on Previously Defined Problems

Section 3: Report on Potential Student Problems

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Organizing for an effective problem solving conversation

A key to collective problem solving is to provide a visual context that allows everyone to follow and contribute.

Using Meeting Minutes

- Documentation
  1. Logistics of meeting
  2. Time, place, location, attendees present
  3. Agenda items for meeting
  4. New problem statements, solutions/decisions/evaluation plan
  5. General administrative topics
    - topic, decisions made, tasks and timelines assigned

- Reviewing Meeting minutes
  - Snapshot of what happened at the previous meeting and what needs to be reviewed during the current meeting

- Visual tracking of focus topics
  - Prevents idle conversations
  - Prevents repetition
  - Encourages completion of tasks

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End of Meeting Brief Debrief

Evaluation of Team Meeting (Mark your ratings with an "X")

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>So-So</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Was today’s meeting a good use of our time?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. In general, did we do a good job of tracking whether we’re completing the tasks we agreed on at previous meetings?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. In general, have we done a good job of actually completing the tasks we agreed on at previous meetings?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. In general, are the completed tasks having the desired effects on student behavior?</td>
<td></td>
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</tr>
</tbody>
</table>

Where in the Form would you place:
1. Schedule for hallway monitoring for next month
2. Too many students in the "intensive support" for literacy
1. Status of fights on playground in last month.
2. Next meeting date/time.
1. Today’s agenda
2. Solutions for a new problem

Precision Statements are pivotal for Solving Identified Problems

Start with Primary Problem Statements

Look at the Big Picture, then use data to refine the Big Picture, moving to development of Precise Problem Statement(s)

Move to Precise Problem Statements

Team-Initiated Problem Solving (TIPS II) Model

Implement Solution with High Integrity

Identify Goal For Change

Identify Problem with Precision

Monitor Impact of Solution and Compare against Goal

Implement Solution and Create Implementation Plan with Contextual Fit

Collect and Use Data

Make Summative Evaluation Decision

Meeting Foundations

SWIS summary 2012-13 (Majors Only)

<table>
<thead>
<tr>
<th>Grade Range</th>
<th>Number of Schools</th>
<th>Mean Enrollment per school</th>
<th>Mean ODRs per 100 student/school day</th>
<th>Median ODRs per 100 student/school day</th>
<th>25th Percentile ODR per 100 student/school day</th>
<th>75th Percentile ODR per 100 student/school day</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-6</td>
<td>3321</td>
<td>451</td>
<td>.32 (.38)</td>
<td>21</td>
<td>10</td>
<td>39</td>
</tr>
<tr>
<td>6-9</td>
<td>985</td>
<td>614</td>
<td>.58 (.76)</td>
<td>40</td>
<td>22</td>
<td>69</td>
</tr>
<tr>
<td>9-12</td>
<td>563</td>
<td>805</td>
<td>.69 (.70)</td>
<td>49</td>
<td>27</td>
<td>89</td>
</tr>
<tr>
<td>PreK-8</td>
<td>297</td>
<td>445</td>
<td>.49 (.56)</td>
<td>32</td>
<td>15</td>
<td>60</td>
</tr>
<tr>
<td>PreK-12</td>
<td>74</td>
<td>338</td>
<td>.81 (1.30)</td>
<td>44</td>
<td>20</td>
<td>80</td>
</tr>
</tbody>
</table>

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Transforming data into useful information

- Begin at general School Wide (SW) level, with year-to-date data
- Use data to
- Review past levels, trends & peaks
- Monitor progress by comparing current SW level with national median
- Have individual support plans in place by the 8th week of the school year

Elementary School  465 students  \( \frac{465}{100} = 4.6 \times 0.21 = 0.97 \)

SW Summary Statement:
Our rate of problem behavior has been above the national median for schools our size every month this year. There has been a decreasing trend since December.

Median Line based on 2010-11 Data

- Primary Statements
  - Too many referrals
  - September has more suspensions than last year
  - Gang behavior is increasing
  - The cafeteria is out of control
  - Student disrespect is out of control

- Precision Statements
  - There are more ODRs for aggression on the playground than last year. These are most likely to occur during first recess, with a large number of students, and the aggression is related to getting access to the new playground equipment.

Primary versus Precision Statements

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Examples: Primary to Precise

- Gang-like behavior is increasing
  - Bullying (verbal and physical aggression) on the playground is increasing during "free choose" is now occurring at recess, during lunch, and even during school, and seems to be maintained by social praise from the bystander peer group.

- Texting during school is becoming more negative
  - A large number of students in each grade level (6, 7, 8) are using texting to spread rumors, and harass peers. Texting occurs both during the school day, and after school, and appears to be maintained by attention from others.

- Bullying (verbal and physical aggression) on the playground is increasing during "free choose" is now occurring at recess, during lunch, and even during school, and seems to be maintained by social praise from the bystander peer group.

Examples: Primary to Precise

- Carly is having reading difficulties
  - Carly is reading 20 cwpm (goal is 60), skips or guesses at words she doesn’t know, mostly during language arts.
  - Carly can not decode and struggles to read words containing R controlled vowels, digraphs, & long vowels.

- Jack is having lots of trouble at home
  - Jack screams and cries at home, daily, when asked to get in car, do homework, and get ready for bed. He does not like riding in the car and does not like doing school work at home.

After the Dashboard has finished loading, click the "Drill Down" button to generate the Drill Down report.

Report defaults to a Location graph, providing Where information for our Precise Problem Statement.

Select and Produce "Time of Day" graph to provide When information for the Precise Problem Statement.
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What We’ve Learned

- For 10/1/2011 – 12/31/2011 Time Range, the majority of the 77 referrals for Defiance:
  - involve 3rd & 4th graders
  - happen on Playground, Class, and Hall
  - occur between 11:45am and 12:00pm
- Let’s load those Report Filter items and see the actual number/proportion of Defiance referrals they account for…


64

Problem Behavior, Locations, Grades, and Time Range are now available in the dataset.

These variables account for 38/77 (49%) of referrals for Defiance.
TIPS Overview for NCSPA 2012

Precise Problem Statement for TIPS Demo School

- Many 3rd and 4th graders (Who)
- are engaging in Defiance (What)
- between 11:45am and 12:00pm, near the end of their 30-minute recess period (When),
- with most of these instances occurring on the playground, in class, or in the hall (Where)

Defining a Quantitative Goal

What:
- Set a Goal that is a reduction from current (baseline) status of precisely-defined problem.
- Reduction in current monthly count (frequency) of problem behavior, or
- Reduction in current daily rate (count/number of school days) of problem behavior
- Setting a Goal of zero will likely be self-defeating; set a Goal that you believe is currently attainable

By When:
- Identify date by which you expect (hope) to achieve Goal (e.g., “By date of our April team meeting”)

Defining Goals

- How do we want the problem to change?
- What evidence do we need to show that we have achieved our goal?
- When will we meet our goal?

<table>
<thead>
<tr>
<th>Problem</th>
<th>Current Level</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many students are leaving garbage in cafeteria resulting in conflict and ODRs. The behavior is maintained because students are rushing to get to the common area for social time.</td>
<td>22 ODRs per month from Cafeteria</td>
<td>&lt;5 ODRs per month from Cafeteria as of Feb 15</td>
</tr>
<tr>
<td>Heidi (supervisor) rates Cafeteria as “1” (low) on a 1-5 scale of Cleanliness</td>
<td>Heidi rates Cafeteria as “4” for cleanliness two weeks in a row by Feb 15</td>
<td></td>
</tr>
</tbody>
</table>

Goal or No Goal

- Reduce instances of 3rd & 4th grade disrespect on the playground from more than 5 per month to no more than 2 per month by the end of the year
- Reduce instances of 3rd & 4th grade disrespect on the playground from more than 5 per month to no more than 2 per month by the end of the year
- Reduce tardies in 9th grade
- No 9th grade tardies for the remainder of the school year

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Recording the Goal & Current Level in meeting minutes

Fidelity Check Routine
We do what we say we will do & we do it with 80% fidelity

Establish a fidelity check routine that relates to School Wide Implementation.

A 1-5 scale is used for all questions, with up to three questions per week.

At staff meeting, use fist of five while asking questions.

In staff room, create number line poster with questions.

Fidelity of Implementation Check Board
Example

We all agreed to learn 5 student names (not in our class) a week.

How did it go? 1 2 3 4 5

Not well 3rd & 4th graders will use a recess to classroom transition routine

Are students using the routine? 1 2 3 4 5

Yes

The data that are gathered and used for discussion & decision making:

4, 5 = congratulations, implemented with fidelity

1-3 = partial implementation

1-3: ask why? what would it take to score a 4 or 5?

Solution Implementation Plan Elements

<table>
<thead>
<tr>
<th>Solution Action</th>
<th>Solution Action Elements Defined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevent</td>
<td>Focus on prevention first. How could we reduce the situations that lead to these behaviors?</td>
</tr>
<tr>
<td>Teach</td>
<td>How do we ensure that students know what they SHOULD be doing when these situations arise?</td>
</tr>
<tr>
<td>Reward</td>
<td>How do we ensure that appropriate behavior is recognized?</td>
</tr>
<tr>
<td>Extinguish</td>
<td>How do we work to ensure that problematic behavior is NOT being rewarded.</td>
</tr>
<tr>
<td>Correct</td>
<td>How will you correct errors?</td>
</tr>
<tr>
<td>Safety</td>
<td>Are additional safety precautions needed?</td>
</tr>
</tbody>
</table>

Using meeting to document Implementation Plans

For every solution action, define who will complete it with a specific date for completion.
Making a Decision

Decisions should resolve relevant questions for:

- Potential problems - Are we going to address this potential problem now?
- Previously-Identified/Defined problems - How?
- Are we going to address this potential problem now?
- Is the solution succeeding at resolving the problem?
- Are we going to modify solution in some way? How?
- Do we need to change timeline for Goal? To what?
- Do we need to improve solution implementation? How?
- Do we need to revise the Goal itself? To what?
- Do we need to revise the definition of the precisely-defined problem? To what?

If decisions have associated tasks, the Minute Take will make sure to record:

- What is to do what
- By whom

What, Who, Where, When, and Why?

Identify Problem with Precision

Implement Solution with High Fidelity

Collect and Use Data

Monitor Impact of Solution and Compare against Goal

Identify Goal For Change

Make Informed Decision

Compare data to goal.

Did we implement with fidelity?

What are we going to do to bring down related change?

Team Data Access

Team Commitment

TIPS Team Training Readiness

Coaching Commitment
TIPS Team Training Readiness
10 readiness guidelines

Team Membership
1. Representation needed for meeting their purpose
2. Inclusion and presence of administrator with authority to make decisions

Team Data Access
3. Data available for problem solving & decision-making before and during the meeting
4. Consistent process & procedures for documenting & entering data exists
5. Team member is fluent in generating basic and custom reports from data set(s) being used

TIPS Problem Solving Mantra

<table>
<thead>
<tr>
<th>What to Do</th>
<th>Questions to Ask</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify Goal for Change</td>
<td>How do we want the problem to change? What evidence do we need to show that we have achieved our goal?</td>
</tr>
<tr>
<td>Identify Solution and Create Implementation Plan with Contextual Fit</td>
<td>How are we going to solve the problem? How are we going to bring about desired change? Is solution appropriate for problem? Is solution likely to produce desired change?</td>
</tr>
<tr>
<td>Implement Solution with High Integrity</td>
<td>How will we know solution was implemented with fidelity? Did we implement solution with fidelity?</td>
</tr>
<tr>
<td>Monitor Impact of Solution and Compare Against Goal</td>
<td>Are we solving the problem? Is desired goal being achieved?</td>
</tr>
<tr>
<td>Make Summative Evaluation Decision</td>
<td>Has the problem been solved? Has desired goal been achieved? What should we do next?</td>
</tr>
</tbody>
</table>

TIPS is Generalizable to other Data Sets
- Academic data
- Attendance data
- CICO-SWIS
- ISIS-SWIS
- Fidelity of Implementation data
- PBIS Assessment Surveys

Elements of Precision across content areas

<table>
<thead>
<tr>
<th>Primary Statement</th>
<th>Precise Statement (No Big I)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td></td>
</tr>
<tr>
<td>Academics</td>
<td>Comprehension (o phonemic awareness or single digit sounds, etc.)</td>
</tr>
<tr>
<td>Life Skills</td>
<td>Reading (or math)</td>
</tr>
</tbody>
</table>

Is there a problem?
Academic Reference Points

Presented by: Dale Cusumano, Ph.D.
DIBELS Universal Screening
Dynamic Indicators of Basic Early Literacy Skills
Kindergarten Distribution Summary

<table>
<thead>
<tr>
<th>Grade</th>
<th>LF</th>
<th>LNF</th>
<th>LF</th>
<th>LNF</th>
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<tbody>
<tr>
<td></td>
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Primary Problem Statement
Our DIBELS Distribution summary shows that 49% of our kindergarten students at Adams Elementary fall in the strategic and intensive range. We have over 50% of our students requiring strategic and intensive supports for ISF, LNF.

Primary Goal
At least 80% of our Kinders will be in Benchmark range at Winter Universal Screening Time.

What?
Only 62% of 4th graders and 65% of 5th graders are meeting expectations in reading comprehension at the winter benchmark; although a slight improvement from fall to winter is noted, it is below the goal of having 80%.

Who?
Low Risk > 14 CR

All close to goal of 14 CR

Who?
Four 4th graders have the lowest scores on measures of reading comprehension. Other students are below expectation but their scores are within ±1 correct responses (CR) of the target (14 CR). Scores for these four students fall in the At Risk range, which is below the 10th percentile on national norms.

Who?
Three 4th grade students are performing well below expectation in reading comprehension that is presented at grade level. These students also have weak reading fluency skills that fall well below expectation, which is thought to be the reason for their low reading comprehension skills. A fourth student (Sally) also is performing well below expectation in reading comprehension, but her reading fluency skills are in expected ranges. Weak vocabulary skills may be lowering her comprehension skills.

Why?
Let us look at reading fluency as a possible reason for these four students' low reading comprehension.

Evaluate the Problem: Did we make a difference?

Evaluate the Problem: Did we make a difference?

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TIPS Overview for NCSPA 2012

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