Discrete Teacher Practices as Predictors of Student Success

Keys

- Student behavior won’t change until adult behavior changes -- **Adults Matter!**
- ALL behavior change is an instructional process -- **Instruction Matters!**
- It’s all about probability – what’s the simplest way to make a difference in the success:failure ratio of a student? -- **Practices Matter!**

Organization and Consistency

Schedule Considerations

- Teach behavior beginning with arrival times
- Consistency with scheduled activities
- Consider sequencing and length of activities
- Plan for and teach clean-up & transition routines
- Explaining and remind about changes

Routines and Arrangements

- **Seating**
  - Teacher’s desk
  - Students’ desks
- **Sight lines**
  - Teacher positions
  - 1 second rule
- **Routines**
  - Consider routines (e.g., pencil sharpening, getting water, using the bathroom, beginning and end of day)

Proximity

Consider the teacher’s placement in the room in relation to the students.

- **Movement**
  - Continue moving around room and maintain frequent close proximity to all students
- **Approach**
  - Hovering near to a particular student or area
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**Explicit Instruction**

- **Modeling**
  - Show and tell students what it is that is expected under specific circumstances. Do not assume that they know and can.
  - Use verbal prompts along with physical demonstration
    - "Watch me, notice how I use a quiet, inside voice when I say this - 'excuse me'."
    - "Right now I'm thinking that I need to do something smart because I'm feeling mad - so watch me take a deep breath and walk away."
  - Use natural models
    - "Did you notice how Billy held that door open for Ben? That was very responsible."
    - "Remember how we talked about ignoring loud noises? Look at Andrea right now - that's great because she's focused on her work."

**Verbal Prompts and Pre-Correction**

- **Verbal Prompts**
  - Clear statements that act as reminders
  - Delivered in contexts where failure is predictable
  - Use the smallest necessary to facilitate success
    - "Remember to raise your hand."
- **Pre-Correction**
  - Clear question that acts as reminder
  - Student is required to respond
  - Teacher praises or corrects student response
    - "What will you do if you need my help?"
    - "Raise my hand."
    - "Exactly, good for you!"

**Engage Students**

- **Opportunities to Respond**
  - Providing students with opportunities to be engaged with instruction
  - Asking questions
    - Group (choral) or individual responses
    - Closed or open ended questions
    - Why?
  - Requests for student behavior
    - Raise hand to indicate agreement
    - Create and share
    - Demonstrate
    - Tell story (relevant)

**Consistent Feedback**

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Correction
Feedback that behavior is inappropriate
• “is that the right way?”
• “is there a better way?”
• “are you being respectful – why not?”
Re-teach appropriate behavior
• “what is a better way?”
• “what would it look like if it was done better?”
• “what is a more respectful behavior?”
Re-teach appropriate behavior
• “Show me that — thanks – remember to do that.”

Analysis of Instruction is our check of bodily temperature
• Observe how teachers and students interact during typical classroom instructional periods
• 15 minute observations of individual student in context of classroom
• Duration and frequency measures
• Look at descriptive stats, correlations, conditional probabilities, and higher level analyses

Observation Codes

<table>
<thead>
<tr>
<th>Teacher Behaviors</th>
<th>Student Behaviors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Tchg</td>
<td>OTR Grp</td>
</tr>
<tr>
<td>.99</td>
<td>.93</td>
</tr>
<tr>
<td>Active Eng</td>
<td>Passive Eng</td>
</tr>
<tr>
<td>.97</td>
<td>.98</td>
</tr>
</tbody>
</table>

General Education Settings
3621 Observations

Observations by Content Area
General Education Classrooms
Discrete Teacher Practices as Predictors of Student Success

**Time Spent Teaching**

- Teacher is **Teaching** if...
  - Working with curriculum AND / OR
  - Monitoring students

**Extrapolating Across the School Year**

*Teaching*

Assuming 5 hour school day, 20 day school month, and 180 day school year

<table>
<thead>
<tr>
<th></th>
<th>% of 15 min Not Teaching</th>
<th>Instruction Time Not Used (no teaching or monitoring)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per Hour</td>
<td>Per Day</td>
</tr>
<tr>
<td>Elementary</td>
<td>14%</td>
<td>8.4 min</td>
</tr>
<tr>
<td>Middle School</td>
<td>10%</td>
<td>6 min</td>
</tr>
<tr>
<td>High School</td>
<td>28%</td>
<td>16.8 min</td>
</tr>
</tbody>
</table>

**Definition of Not Teaching:**
Teacher is not engaging students and is involved in independent task with no interactions with student.

**Recommended Practice: OTR**

- CEC (1987)
  - Acquisition: 4-6 per min @ 80%
  - Drill: 8-12 per min @ 90%

- See positive effects on student engagement at 3 per minute

- If student responds (Haydon, Mancil, & Van Loan, 2009; Pitts, Robertson, Maggin, Oliver & Wehby, 2010; Sutherland, Aider & Gurler, 2003)

**Opportunities to Respond**

<table>
<thead>
<tr>
<th></th>
<th>Elementary</th>
<th>Mid School</th>
<th>High School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate per Minute</td>
<td>0.71</td>
<td>0.61</td>
<td>0.48</td>
</tr>
</tbody>
</table>

**Extrapolating Across the School Year**

*OTR*

Assuming 5 hour school day, 20 day school month, and 180 day school year

<table>
<thead>
<tr>
<th>Minimum Recommended Rate = 3 per min</th>
<th>OTR Rate per min</th>
<th>Number of OTRs Below Minimum Recommended Rate</th>
<th>Per min</th>
<th>Per Hour</th>
<th>Per Day</th>
<th>Per Month</th>
<th>Per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>71</td>
<td>11</td>
<td>82</td>
<td>-2.18</td>
<td>-130.8</td>
<td>-854</td>
<td>-117,720</td>
</tr>
<tr>
<td>Middle School</td>
<td>61</td>
<td>06</td>
<td>67</td>
<td>-2.33</td>
<td>-139.8</td>
<td>-699</td>
<td>-125,820</td>
</tr>
<tr>
<td>High School</td>
<td>48</td>
<td>04</td>
<td>52</td>
<td>-2.48</td>
<td>-148.8</td>
<td>-744</td>
<td>-133,920</td>
</tr>
</tbody>
</table>

**Definition of OTR (group and individual):**
Teacher provides a curriculum relevant opportunity to respond that is directed to the individual or to the whole class or small group that includes the target student. Must be instruction related and not a social question, a question within the context of negative feedback or a direction to perform a task.

**Recommended Practice: Feedback**

- The field at large recommends somewhere between 3 and 6 positive to every 1 negative (Gable, Hester, Rock, Hughes, 2009; Kerr & Nelson, 2006; Nafpaktitis, Mayer, & Butterworth, 1985; Scott, Anderson, & Alter, 2011; Stichter et al., 2009; Walker, Ramsay, & Gresham, 2004)

- Mental health (Fredrickson & Losada, 2005)
  - 2.5 : 1 predicts normal functioning
  - 4.3 : 1 predicts optimal functioning
  - Tipping point seems to be 2.9 : 1

- Marriage (Gottman, 1994)
  - Flourishing marriage 4.7:1 actions; 5:1 speech
  - Poor marriage .7:1 actions; .9:1 speech

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Feedback

Extrapolating Across the School Year

Feedback
Assuming 5 hour school day, 20 day school month, and 180 day school year

<table>
<thead>
<tr>
<th>Ratios</th>
<th>.8 : 1</th>
<th>.6 : 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pos.</td>
<td>0.09</td>
<td>0.05</td>
</tr>
<tr>
<td>Neg.</td>
<td>0.04</td>
<td>0.03</td>
</tr>
<tr>
<td>Correction</td>
<td>0.05</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Minimum recommended positive to negative ratio of 3:1

<table>
<thead>
<tr>
<th>Feedback Rate per min</th>
<th>Pos. Min</th>
<th>Neg. Min</th>
<th>Pos. Per Hour</th>
<th>Neg. Per Hour</th>
<th>Pos. Per Day</th>
<th>Neg. Per Day</th>
<th>Pos. Per Month</th>
<th>Neg. Per Month</th>
<th>Pos. Per Year</th>
<th>Neg. Per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>.09</td>
<td>.05</td>
<td>-3.6</td>
<td>-18</td>
<td>-360</td>
<td>-3.240</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle School</td>
<td>.04</td>
<td>.05</td>
<td>-6.6</td>
<td>-33</td>
<td>-660</td>
<td>-5.940</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>.03</td>
<td>.05</td>
<td>-7.2</td>
<td>-36</td>
<td>-720</td>
<td>-6.480</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Definition of Feedback (positive and negative)
Teacher gives the class or individual student specific feedback on an academic or social behavior that indicates the behavior/response is correct or incorrect. Does not include correction (negative feedback with re-teaching)

Student Engagement

Extrapolating Across the School Year

Engagement
Assuming 5 hour school day, 20 day school month, and 180 day school year

<table>
<thead>
<tr>
<th>% engaged per min during 15 min</th>
<th>Off task and down time (not engaged)</th>
<th>Total time spent off task or down time (not engaged)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Observed Time</td>
<td>Per Hour</td>
<td>Per Day</td>
</tr>
<tr>
<td></td>
<td>Per Month</td>
<td>Per Year</td>
</tr>
<tr>
<td>Elementary</td>
<td>93%</td>
<td>7%</td>
</tr>
<tr>
<td>Middle School</td>
<td>90%</td>
<td>10%</td>
</tr>
<tr>
<td>High School</td>
<td>82%</td>
<td>18%</td>
</tr>
</tbody>
</table>

Definition of Engagement (active and passive)
Active: engaging with instructional content via choral response, raising hand, responding to teacher instruction, writing, reading, or otherwise completing assigned task. Passive: attending to instruction by orientation to teacher or peer if appropriate.

SCOA iPad Application

School/Classroom Observation & Evaluation

- Includes all effective instruction codes for teachers and students
- New codes may be added
- Duration and frequency data
- Includes walk-through assessment component
- Generates graphs (export)
- Facilitates repeated observations of same teacher/context/student
- Data can be dumped into Excel or SPSS for reliability calculations and complex analyses
- Continuing updates

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