Introduction

- In 2009, the Iowa Department of Education (DE) supported an initiative for each Area Education Agency (AEA) to develop their own challenging behavior team to assess behavior.
- The initiative expanded to the state’s larger school districts in 2013.
- The DE contracted with a team of behavior analysts from the University of Iowa Children’s Hospital to provide training in the area of functional behavior assessment (e.g., descriptive assessments, choice analyses, and functional analyses).
- Behavior teams progressed from the skill acquisition phase to the maintenance phase.
- Skill acquisition phase provided modeling and coaching of assessments until trainees became knowledgeable of behavior principles and behavior assessment, and demonstrated their independence in conducting the assessments.
- Maintenance phase allowed trainee skills to continue to be assessed for independence.
- At the beginning of the 2016–17 school year, there were 30 trainees in the skill acquisition phase and 28 trainees in the maintenance phase.
- In 2016, student outcome data were collected and these data indicated a decrease in levels of challenging behavior, a decrease in the use of time-out and restraint, and an increase in the use of appropriate behaviors.

Training Model

Didactic training

- 2 to 3 hour lectures on behavioral principles, assessment, and intervention conducted via teleconferencing.
- Offered 2 times per month.

Hands-on training

- Full day training sessions were offered 10–13 times throughout the school year.
- All trainings were in the school setting or in a clinic designed for behavior assessment at the University of Iowa Children’s Hospital.
- Trainings were conducted with students who had been referred to the training team due to their engagement in challenging behavior.

Assessments Conducted by Trainees 2015–16 School Year

<table>
<thead>
<tr>
<th>Team</th>
<th>Descriptive Assessment</th>
<th>Preference Assessment</th>
<th>Functional Analysis</th>
<th>Generalized Operants</th>
<th>Structural Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEA Team</td>
<td>11.7 (15-42)</td>
<td>11.5 (12-27)</td>
<td>6.0 (4-11)</td>
<td>6.4 (3-9)</td>
<td>3.5 (2-5)</td>
</tr>
<tr>
<td>School District Team</td>
<td>3.8 (2-21)</td>
<td>9.6 (3-34)</td>
<td>1.3 (1-17)</td>
<td>3.4 (2-16)</td>
<td>3.5 (2-9)</td>
</tr>
</tbody>
</table>

Study Procedures

A Student Progress Monitoring Survey was created to evaluate several factors related to student behavioral outcomes and trainee assessment and intervention practices to better understand the impact of conducting taught assessments as part of a functional behavior assessment.

Surveys were sent to approximately one-third of the students evaluated during the 2015–16 academic year and the first half of the 2016–17 year.

The sample was obtained by using a random number generator to identify approximately one-third of the students for each behavior team participating in training.

The survey was emailed to the primary contact for the student.

Reminders were sent to obtain data.

Teams evaluated 140 students during training sessions during the time period. Surveys were requested for 58 students. Surveys were returned for 51 students (86% of the students who were assessed during training sessions).

Results

Student Outcomes: Behavioral Outcomes

<table>
<thead>
<tr>
<th>Increasing Trend of Problem Behavior</th>
<th>Decreasing Trend of Problem Behavior</th>
<th>Decrease in Problem Behavior (N=155)</th>
<th>Increase in Appropriate Behavior (N=105)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preference</td>
<td>Preference</td>
<td>Preference</td>
<td>Preference</td>
</tr>
<tr>
<td>5%</td>
<td>74%</td>
<td>13%</td>
<td>54%</td>
</tr>
</tbody>
</table>

*Total number of students with accessible data.

74% of trainees reported a decreasing trend in problem behavior during their involvement with the student. An average of 31% increase in appropriate behavior and 64% decrease in problem behaviors was reported by the trainees who were able to submit baseline and current data.

Participants

Individuals Trained During 2015–16 School Year

<table>
<thead>
<tr>
<th>Discipline of Last Degree</th>
<th>N</th>
<th>Average Experience</th>
<th>Range of Experience (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Work</td>
<td>19</td>
<td>10</td>
<td>1-24</td>
</tr>
<tr>
<td>Special Education</td>
<td>13</td>
<td>19</td>
<td>7-32</td>
</tr>
<tr>
<td>Psychology</td>
<td>10</td>
<td>10</td>
<td>2-22</td>
</tr>
<tr>
<td>Administration</td>
<td>6</td>
<td>12</td>
<td>8-20</td>
</tr>
<tr>
<td>Behavior Analysis</td>
<td>6</td>
<td>10</td>
<td>5-17</td>
</tr>
<tr>
<td>School Counseling/Bachelor’s</td>
<td>4</td>
<td>6</td>
<td>3-7</td>
</tr>
</tbody>
</table>

Discussion

We have been training behavior teams across the state of Iowa to conduct the full range of assessments within a functional behavior assessment. We have learned that the teams are able to learn how to independently conduct preference assessments, functional analyses, concurrent operant assessments, and structural analyses. In 2015–16, we began to assess whether these assessments are having any effect on the behaviors of students. Data suggest that positive outcomes are occurring for the individual students who are evaluated during training visits. Regardless of whether the trainee who worked with the student was at the advanced level or not, trainees reported the following positive changes in their student’s behaviors:

- Engagement in challenging behavior has decreased.
- Engagement in appropriate behavior has increased.
- Use of time out and restraint has decreased.

Additional findings:

- The time our trainees spend with each student outside of our training visits varies across teams and training teams. For example, some trainees devoted five hours to additional assessment (24% spent 0–4 hours) and intervention (31% spent 0–4 hours) with their student; yet, other trainees spent 32+ hours in assessment (72%) and intervention (20%) with their student. Suggesting that the range in how much time is spent with students is great.

Students Included

- **Age of Student Sample**
  - Ages 4–9: 75%
  - Ages 10–15: 25%

- **Diagnosis**
  - Developmental Delay: 39%
  - No Known Disability: 39%
  - Autism: 22%

- **Use of Time Out**
  - Time Out Used: 40% Yes, 45% No, 9% Don't Know

  - Decrease in Duration (N=97): 100% reported a decrease in frequency of time out.
  - Decrease in Frequency (N=122): 100% reported a decrease in duration of time out.

- **Use of Restriction**
  - Restriction Used: 25% Yes, 60% No, 15% Don't Know

  - Decrease in Duration (N=21): 100% reported a decrease in the use of restriction.
  - Decrease in Frequency (N=77): 86% reported a decrease in the use of time out.

- **Behavior Team Outcomes:**
  - Type of Assessment Conducted:
    - Concurrent (N=28): 86% Yes, 7% No, 7% Don't Know
    - Maintenance (N=22): 86% Yes, 7% No, 7% Don't Know

- **Time Spent with Student:**
  - Assessment: 24% spent 0–4 hours, 14% spent 4–8 hours, 31% spent 8–20 hours, 16% spent 20–32 hours, 16% spent 32+ hours.

- **IEP and Implementation Outcomes:**
  - FBA Revised: 73% Yes, 59% No, 75% Don't Know
  - BIP Revised: 16% Yes, 16% No, 12% Don't Know

- **Trainee's report of times spent in assessment varied, but most trainees (60%) spent between one-half a day and two full days conducting their assessments. Time spent modeling intervention also varied.**