The Kaleidoscope Program: Early Intervention Program for Students with Behavior Challenges

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Supporting partnerships among schools, families, and communities through
collaboration, engagement, and research
Students with behavior challenges are at increased risk for a variety of negative school and life outcomes.

It is critical to develop and implement early intervention programs that effectively moderate the effect of at-risk factors.

The urgent need in the field for more research on early intervention programs

(Bub, McCartney, & Willet, 2007; Lopes, 2007; Lalongo, Poduska, Werthamer, & Kellam, 2001; Reinke, Herman, Petras, & Ialongo, 2008; Scholfield, Bierman, Heinrichs & Nix, 2008; Vitaro, Brendgen, Larose, & Trembaly, 2005)
Purpose

- Understanding the program and its critical components
- Examining the functions, services and supports
- Examining broad program outcome
Method

Mix method study (qualitative and quantitative)

90 minutes focus group interview

Existing program data from 2007-2015.
Purpose of the Kaleidoscope Program

- Prevent the need for more intensive interventions.
- Guide the process for students who do need more intensive support.
- Support families, teachers, students, schools
Team concept for delivery of services
- Behavior specialist and Social worker
- 1-6 focused team(s)
- Kindergarten focused teams
  - More intense needs. May not have attended preschool, social skills instruction, different style of teaching, need to teach “how to do school”

Intervene during the elementary years—“it’s more effective.”

Effective case loads for intervention team
- 20-25 students per team
August 2007
• Two Behavior Specialists

October 2007
• Two social workers added creating the first two teams.

Fall 2009
• Two more teams were added, totaling four teams. East, West, South, and 1 Kindergarten team

Fall 2010
• Added one team, totaling 5 teams. East, West, South, and 2 K teams Same year three teams focused on middle and high school.

Fall 2014
• One team added, totaling 6 teams. (East, West, Central, and 2 K teams)
Critical Components

- Professional problem solvers!
  - Assess and come up with a plan to solve a problem.

- Solutions are most often...
  - Intervention plans across home and school (Environmental assessment and modification)
  - Relationship building
  - Educating parents about how to communicate with professionals about their child.
  - Education for teachers and other school professionals about mental health
  - Ease frustrations
Referral Process

1. Referral from principal, social worker, or teacher. Signed consent from parent. Teacher reads "parent consent" and "referral form".
2. Kal Director gathers brief information related to the problem and forwards case to the assigned team.
3. Kaleidoscope staff make contact with home and school within 24-48 hours.
4. Schedule observation at school and conduct parent meeting in the home/school.
After the initial meeting at school and home...

- Questions are asked to elicit information to see where they are in the RTI process. Is it a crisis situation where immediate and more intense services are needed?
- FBAs are done as needed.
- Behavior plan is not required but are done often.
  - FBAs and behavior plans are also seen as an opportunity to educate.
- Action plans are created at the kindergarten level.
  - If action plan doesn’t work, a formal FBA is done.
- All teams use an assessment to understand family needs in terms of resources.
Why it works…

- A fresh perspective
  - “It’s easy when you’re teaching and get tunnel vision. Fresh perspective is needed and gets things done.”

- “The love of problem solving”
  - Kaleidoscope staff love to problem solve and they are good at it!
  - Teachers get busy, not as much time to problem solve.

- The program is purposefully flexible, not rigid.
  - Not confined by the politics of a particular school building.
  - Freedom to problem solve and find solutions.
  - Able to gather resources families need.

- Situated to take the time to hear the perspective of the school and the families.

- Collaborative culture among Kaleidoscope staff
In total 1162 students.

924 (79.5%) were male, and 238 (20.5%) were female.

812 (69.9%) black, 319 (27.5%) white, 31 (2.7%) were others.

45 (3.9%) English Language Learners (ELL).

1071 out of 1271 cases were closed.

99 (8.5%) cases need to be reopened.
Description of Kaleidoscope Participants

Number of students served by school year

- New Cases
- Closed Cases
- Reopened Cases

2007/2008: 77
2008/2009: 75
2009/2010: 80
2010/2011: 111
2011/2012: 117
2012/2013: 126
2013/2014: 180
2014/2015: 205

2007/2008: 13
2008/2009: 14
2009/2010: 9
2010/2011: 18
2011/2012: 19
2012/2013: 12
2013/2014: 1
2014/2015: 1
Grade level of students referred to Kaleidoscope (2007-2015)
Primary reason for referral to Kaleidoscope (2007-2015)
Intensity of Services

- Social work hours: Mean=13.29; Median=8; Min=0, Max=150
- Behavior specialist hours: Mean=16.17; Median=12; Min=0, Max=162
- Number of intervention: Mean=40.14; Median=28; Min=1, Max=393
- Service duration (days): Mean=201; Median=160; Min=1, Max=1212

- None: 25.7%
- Low: 21.3%
- Moderate: 29.6%
- High: 23.4%
Social worker referral to outside agency (2007-2015)

Percentage of cases referred to outside agency (2007-2015)

- Outside agency: 46.1%
- Basic needs: 24.1%
- Medical assistance: 17.8%
- Health insurance: 9.0%
- Legal assistance: 3.8%

* Proportion analysis indicated that the positive proportion in posttest was statistically higher than the positive proportion in pretest.
Teacher collaboration with Kaleidoscope (2007-2015)
Proportion analysis was used to check the change in pre and post classroom management score. Findings indicated the improvement is not statistically significant ($z=-0.97$, $p>0.05$).
Behavior rating scale (2007-2015)

T test was conducted for 634 students who had both pre and post BRS scores. The results indicated that this is a statistically significant improvement ($t = -18.545; df = 633; p < .001$)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre BRS</td>
<td>1013</td>
<td>11</td>
<td>55</td>
<td>26.02</td>
<td>7.222</td>
</tr>
<tr>
<td>Post BRS</td>
<td>641</td>
<td>11</td>
<td>55</td>
<td>32.9</td>
<td>9.301</td>
</tr>
</tbody>
</table>
Behavior rating scale (2007-2015)

Notes: ★ means that there is a significant difference between pre and post score
### Predicting improvements in behavior using BRS change scores

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Classroom management-Post</strong></td>
<td>4.441</td>
<td>1.421</td>
<td>.154</td>
</tr>
<tr>
<td><strong>Teacher collaboration with Kal</strong></td>
<td>-3.565</td>
<td>1.325</td>
<td>-.132</td>
</tr>
<tr>
<td>Parent involvement with social worker</td>
<td>-.827</td>
<td>.531</td>
<td>-.084</td>
</tr>
<tr>
<td><strong>Parent relationship with school-Post</strong></td>
<td>2.439</td>
<td>.679</td>
<td>.179</td>
</tr>
<tr>
<td>Social worker hours</td>
<td>.012</td>
<td>.030</td>
<td>.023</td>
</tr>
<tr>
<td>Behavior specialist hours</td>
<td>-.032</td>
<td>.053</td>
<td>-.055</td>
</tr>
<tr>
<td><em>Number of interventions</em></td>
<td>.047</td>
<td>.018</td>
<td>.220</td>
</tr>
</tbody>
</table>

Note. * p < .05; ** p < .01
Prediction Analysis

Model is statistically significant ($F = 6.501; p < .001$): Adjusted $R^2$ indicates predictors account for 8% of variance (see Table)

†Improved behavioral functioning as rated by the BRS was predicted by four factors (statistically significant):

(1) Teacher positive classroom management at exit
(2) Parent relationship with school at exit
(3) Number of interventions provided to student and family
(4) Teacher collaboration with Kaleidoscope (negative)
Students in special and general education (2007-2015)

Percent of general and special ed at enrollment and exit

- Entry (n=1271): 69.0% General Education, 31.0% Special Education
- Exit (n=874): 68.4% General Education, 31.6% Special Education

Exit Reasons

- Able to remain at home school: 47.8%
- Moved out of IPS or withdrew: 15.6%
- Diagnostic placement/ROOTS: 8.1%
- EH-SC/S2 placement: 8.0%
- Transitioned to special educ./CC: 5.6%
- Middle school or secondary team of Kal: 5.4%
- Parent requested Kal services to end: 2.4%
- Did not return to building behavior specialist: 2.0%
- Homebound services in place: 1.6%
- This school year: 1.1%
- New school: 1.0%
- School closed case: 0.7%
- Other: 0.5%
Discussion

- Kaleidoscope is a strong program with many positive outcomes.
- The unique teaming approach of the program brings ideas, strengths, and concerns about a student to bear on common objectives.
- Assessing and modifying children's school and home environments is another important element of early interventions for behavioral challenges.
- Kaleidoscope supports classroom teachers and works not just with teachers and families, but also with the school and community.
- Programs like Kaleidoscope are needed and have positive outcomes for the students and families we serve.
Recommendations

- Build the theoretical linkages between the activities of Kaleidoscope and outcomes of interest.
- Identify and understand the gaps between what we want to know and what we are measuring.
- Embed data based decision-making in all aspects of Kaleidoscope from actual services.
- Consider involving families and perhaps youth in the administration of Kaleidoscope
Questions?
Thank you!

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