Research On Preschool Inclusion Across Three Decades

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Early Work on Preschool Inclusion

• Integrated Preschool Project at University of Washington
  • Jenkins, Speltz, & Odom (1981)
  • Jenkins, Odom, & Speltz (1985)
  • Odom, DeKlyen, & Jenkins (1983)

• Reverse mainstreamed settings

• Findings
  • Inclusion alone did not have a positive effect on development
  • When structured to provide social integration, positive effect for social competence and language skills
  • Placement in classes with children with disabilities did not impair the development of typically developing children.
Ecobehavioral Assessment

- Observation system
  - Momentary time sample
  - Collects multiple categories
  - Allows one to calculate conditional probabilities: that is, given a child is playing in a small group, in what proportion of intervals does he interact with a peer?
- ESCAPE (Carta & Greenwood, 1988)
- CASPER (Favazza, Odom, & Brown, 1995)
Evolutions of Ecobehavioral Assessment

Barker & Wright (Kansas Ecological Psychologist Group)
Todd Risley-Living Environments Research Group: Kansas
Developed PlayCheck
Carta and Greenwood (1988) (ESCAPE)
Favazza, Brown, & Odom (1990) (CASPER)
Vanderbilt Minnesota Social Interaction Project: ESCAPE

• Found that children with disabilities more socially engaged when they were in pretend play activities.

• Found that children were more engaged overall when they were in child-initiated activities rather than adult-initiated activities.

• All data collected in specialized preschool programs
ECRI Early Childhood Research Institute on Inclusion

- University of North Carolina
  Samuel L. Odom
  Ruth Wolery

- Vanderbilt University
  Eva Horn
  Lynne Cushing

- San Francisco State University
  Marci J. Hanson
  David Fetterman (Stanford - Consultant)

- University of Washington
  Ilene Schwartz
  Susan Sandall

- University of Maryland
  Paula Beckman
  Joan Lieber
The settings for the 16 ECRII Programs included Community Based Child Care and Preschools, Head Starts, and Public School based Early Childhood Programs.
WIDENING the CIRCLE

Including Children with Disabilities in Preschool Programs

Foreword by Carol Copple

SAMUEL L. ODOM
EDITOR
**II. ENVIRONMENTAL AND BEHAVIORAL CODING SYMBOLS**

### ACTIVITY AREA AND ACTIVITY CODES

<table>
<thead>
<tr>
<th>Code</th>
<th>Activity</th>
</tr>
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<tbody>
<tr>
<td>T</td>
<td>Transition</td>
</tr>
<tr>
<td>M</td>
<td>Manipulative</td>
</tr>
<tr>
<td>LM</td>
<td>Large Motor</td>
</tr>
<tr>
<td>B</td>
<td>Story-time (Books)</td>
</tr>
<tr>
<td>A</td>
<td>Art</td>
</tr>
<tr>
<td>P</td>
<td>Pretend Play/Sociodramatic Play</td>
</tr>
<tr>
<td>L</td>
<td>Large Blocks</td>
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<tr>
<td>S</td>
<td>Sensory</td>
</tr>
<tr>
<td>D</td>
<td>Dance/Music/Recitation</td>
</tr>
<tr>
<td>F</td>
<td>Snack/Meals (Food)</td>
</tr>
<tr>
<td>H</td>
<td>Self Care (Self Help)</td>
</tr>
<tr>
<td>R</td>
<td>Pre-Academic/3 Rs</td>
</tr>
<tr>
<td>CP</td>
<td>Computer Activities</td>
</tr>
<tr>
<td>G</td>
<td>Circle Time (Group)</td>
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<tr>
<td>?</td>
<td>Can't Tell</td>
</tr>
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### INITIATOR OF ACTIVITY CODES

<table>
<thead>
<tr>
<th>Code</th>
<th>Initiator</th>
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<tbody>
<tr>
<td>AD</td>
<td>Adult</td>
</tr>
<tr>
<td>CH</td>
<td>Focal Child</td>
</tr>
<tr>
<td>TP</td>
<td>Typical Peer</td>
</tr>
<tr>
<td>DP</td>
<td>Peer with Developmental Delays</td>
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<tr>
<td>?</td>
<td>Can't Tell</td>
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</tbody>
</table>
ENVIRONMENTAL AND BEHAVIORAL CODING SYMBOLS (continued)

- **CHILD BEHAVIOR** (Hierarchy for the following codes)
  - B Books
  - R Pre-academics/3 Rs
  - P Pretending/Sociodramatic Play
  - A Art
  - GR Games with Rules
  - D Singing/Reciting/Dancing
  - H Self Help or Self Care
  - CP Computer
  - M Manipulating
  - LM Large Motor
  - C Clean-up
  - W Walkabout
  - FA Focused Attention
  - NE Not Engaged
  - ? Can't Tell

- **CHILD SOCIAL BEHAVIOR** (Hierarchy for the following codes)
  - SA Social Behavior Directed to Adult
  - NA Negative Social Behavior to Adult
  - SPT Social Behavior Directed to a Typical Peer
  - NPT Negative Social Behavior to a Typical Peer
  - SPD Social Behavior Directed to a Peer with Disabilities
  - NPD Negative Social Behavior to a Peer with Disabilities
  - PFT Social Behavior Directed from a Typical Peer
  - NFT Negative Social Behavior from a Typical Peer
  - PFD Social Behavior Directed from a Peer with Disabilities
  - NFD Negative Social Behavior from a Peer with Disabilities
  - NO No Social Behavior
  - ? Can't Tell
ADULT BEHAVIOR (Hierarchy for the following codes)
AS Adult Support
AA Adult Approval
AC Adult Comment
GD Group Discussion/Directions
NO None
? Can't Tell
Figure 2.2 Overall Engagement for Children With and Without Disabilities

<table>
<thead>
<tr>
<th>Percentage of Intervals</th>
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<tbody>
<tr>
<td>53.5</td>
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<td>58</td>
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<td>58.5</td>
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- Children with Disabilities
- Children without Disabilities

Overall Engagement
Figure 2.1 Teacher-initiated and Child-Initiated Activities for Children With and Without Disabilities
Figure 2.3 Engagement in Teacher-Initiated and Child-Initiated Activities for Children with and Without Disabilities
Are children with autism actively engaged in program activities? What factors affect engagement?

Conditional Probabilities of Engagement

Overall/Unconditional
Adult-initiated activities
Child-initiated activities

mean percentage of observations

Autism
Other Disability
Typically Developing
Figure 2.4b  Child Behavior in Adult- and Child-Initiated Activities for Children without Disabilities
Figure 2.4a  Child Behavior in Adult- and Child-Initiated Activities for Children With Disabilities
Social Acceptance and Rejection (Odom, Zercher et al., 2006)

- Guralnick and other emphasized that children with disabilities socially rejected in inclusive settings.
- Mixed method study about acceptance and rejection
- Observational and qualitative research
- Found, about 1/3 of students with disabilities socially accepted
- Found, about 1/3 of students with disabilities socially rejected by peers
- Found, about 1/3 in the middle
Cost Quality Outcomes of Inclusion (Odom & Buysse)

• Examined different forms of preschool inclusion
  • HS
  • Class-based
  • Public School
  • Blended

• Outcome
  • CASPER Engagement
  • Peer relationships
  • Friendships
  • QIEM
CASPER Engagement (Tsao, Odom et al., 2008)

(3 30-min sample, 143 children)
Degree of Social Participation (Tsao, Odom, et al.)
When Activities Initiated by Adults...

When Activities Initiated by Children...
Peer Rating Sociometric Assessment (Asher et al., 1979)

• Photographs taken of all children
• Children taught to rate
  • Rate foods
  • Rate toys
• Children shown pictures of all other children in class and sort into box
  • 3 = likes a lot  2 = likes a little  1 = does not like
• Average rating and ranking computed
Sociometric Ratings

Mean Peer Rating

- Fall
- Spring
- Range
General Findings for Peer Rating Data

- Mean peer rating tended to maintain across the year at around 2.0 (Like to play with a little)
- No program effects were detected
Playmates and Friends Questionnaire

Use a separate questionnaire to describe the playmates & friends of each selected child.

**Playmates**

1. Who does (circle one) play with! List as many or as few playmates as appropriate using first name and last initial. How often does this child play with each playmate? Check occasionally or frequently.

<table>
<thead>
<tr>
<th>Playmate’s Name</th>
<th>Occasionally</th>
<th>Frequently</th>
<th>Playmate’s Name</th>
<th>Occasionally</th>
<th>Frequently</th>
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<tbody>
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**Special Friends**

2. Who would you say are this child’s special friends? List as many or as few playmates as appropriate.

<table>
<thead>
<tr>
<th>Friend’s Name</th>
<th>Friend’s Age</th>
<th>Male/Female</th>
<th>Is this friend (circle one)</th>
<th>How long have these two children been friends?</th>
<th>Does this friend have a disability? (circle one)</th>
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</thead>
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<tr>
<td>Please indicate the child’s age (circle one):</td>
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</table>

Playmates & Friends (Goldman & Buysse, 2002)
Friendship Survey

Program Types

<table>
<thead>
<tr>
<th></th>
<th>Percentage of Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Friends Fall</td>
<td>1</td>
</tr>
<tr>
<td>Special Friends Spring</td>
<td>1</td>
</tr>
<tr>
<td>Total Friends Fall</td>
<td>4</td>
</tr>
<tr>
<td>Total Friends Spring</td>
<td>5</td>
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</tbody>
</table>

Series 1
General Findings for Friendship Survey

• Children maintained their level of special friendships and total friendships across the year

• Program effects were found:
  • There tended to be a higher number of special friendships reported in the BL classroom than in the HS or PS
Analytic Question

• For Battelle Cognitive and Communication Subscales
  • Significant association on pre-post changes and QIEM Individualization

• For Battelle Motor Subscale
  • Significant association on pre-post changes and QIEM Peer Interaction
Comparison of TEACCH and LEAP for Children with ASD

Reszka, Odom, & Hume, 20010
Figure 4
Initiator of Activity and Peer Social Engagement

Proportion of Social Engagement

<table>
<thead>
<tr>
<th>Initiator of Activity</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focal Child</td>
<td>0.034</td>
</tr>
<tr>
<td>Adult</td>
<td></td>
</tr>
</tbody>
</table>
Looking Into the Future

Exploring Classroom Behavioral Imaging: Moving Closer to Effective and Data-Based Early Childhood Inclusion Planning

Conclusions

• Engagement may differentiate children
• Can be used as a construct to determine children’s involvement in inclusive programs
• The content of engagement is important
• Technology may assist us in assessing and tracking engagement in the future.
What are the burning issues related to individual interventions and engagement?

• Should engagement be the variable for selecting individual children in need of intervention?
• For children with disabilities or other special needs, should engagement be the variable upon which we judge the success of a program?
• What is the relationship between program quality and engagement? Should we expect children to be more engaged in high quality programs, or just equally engaged in “low quality” experiences.
• Burning issues from the participants.