Emerging Findings from Critical Reviews of Literature and Secondary Data Analysis

STAM/CCPCR Meeting

November 16, 2011

The CECER-DLL is funded by the U.S. Dept. of Health and Human Services, Office of Planning, Research and Evaluation (OPRE) in collaboration with the Office of Head Start and the Office of Child Care.
Goals of the Workshop

- Key findings from CECER-DLL activities:
  - Critical reviews of the research literature
  - Secondary data analysis of the ECLS-B dataset

- Discuss findings from the perspective of state administrators from California and Florida

- Open for general discussion
Mission of CECER-DLL

Primary goal:

To advance the capacity of the research field to be able to

- improve assessment and measurement, and
- examine and improve early care & education practices for children who are dual language learners (DLLs) (birth - age 5)
Structure of CECER-DLL

FPG Child Development Institute, UNC-CH
- Dina C. Castro, MPH, PhD* 
  Principal Investigator & Director
- Virginia Buysse PhD* 
  Co-Principal investigator
- Ellen Peisner-Feinberg, PhD* 
  Co-Principal Investigator
- Margaret Burchinal, PhD* 
  Senior Statistician
- Cristina Gillanders, PhD 
  Investigator
- Doré R. LaForett, PhD 
  Project Manager/Investigator
- Jeannette Laboy 
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Federal Partners
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- Wendy DeCourcey, PhD* 
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- Mary Bruce Webb, PhD*

Office of Head Start
- Sharon E. Yandian, MEd*

* indicates member of CECER-DLL Steering Committee
Structure of CECER-DLL (cont’d)

Core Research Advisors

- Allison Fuligni, PhD, California State University, Los Angeles
- Vera Gutierrez-Clellen, PhD, San Diego State University
- Carol S. Hammer, PhD, Temple University
- Lisa Lopez, PhD, University of South Florida
- Julia Mendez, PhD, University of North Carolina, Greensboro

Technical Work Group & Consultants
Center Activities

• Critical reviews of literature
  ➢ Developmental trajectories of DLLs:
    ➢ language & literacy,
    ➢ socio-emotional,
    ➢ cognition
  ➢ Measures of classroom/program quality
  ➢ Evidence-based practices for young DLL
  ➢ Family context of young DLLs (ongoing)
Center Activities

Research activities (continued)

- Secondary data analysis of the ECLS-B:
  - child development outcomes
  - child care utilization

Ongoing activities

- Review of use of developmental measures
- Development of conceptual framework
- Secondary data analysis on L1 & L2 assessments
  - Multiple datasets from studies with DLLs
Products

• Research briefs (8)
  • Listening sessions & Annual Roundtable 2010 (3)
  • Critical reviews of literature and secondary data analysis (5)
  • Annotated bibliographies (4)

• Upcoming:
  • Peer-reviewed journal articles reporting findings of critical research reviews, SDAs, conceptual framework
  • Technical reports and research briefs on methodological guidelines to conduct research with young DLLs
  • Research briefs on upcoming listening sessions
Critical Research Reviews: Method

- Search of research literature in 5 content areas
- Inclusion criteria
  - Published in peer-reviewed journals (2000-2010)
  - Analyses focus on children who are DLLs (exclusively or in subgroup analyses)
  - At least one assessment point occurring prior to age six; cross-sectional & longitudinal studies eligible.
  - Instruments administered either via direct child assessment or standardized ratings completed by observers, parents, or caregivers.
Critical Research Reviews: Method (cont.)

- Exclusion criteria
  - Focus on a specific medical illness
  - Relied on idiosyncratic observations of child behavior
  - Single-subject case research design

- Utilized existing resources (e.g., compendia, reviews)

- Used broad terms to search full-text of articles in literature databases

- Coded & tabled standard set of information for each article

- Findings synthesized & methodological limitations identified
Language & Literacy Development

- Number of studies that met criteria: 139
  - Mostly focused on U.S. samples of Spanish-speaking children.

- DLLs’ language development different from monolinguals.
  - Conceptual vocabularies similar to monolinguals, but ss infants, vocabularies within each language tend to be smaller
  - Differences in grammatical development

- DLLs have two separate language systems.

- DLLs’ abilities in two languages affected by amount of exposure received in those languages.
Social-Emotional Development

- Number of studies that met criteria: 13
- No consistent patterns in development of DLLs compared with non-DLLs.
  - 4/9 found no difference
  - 5/9 found differences favoring DLL, but effect sizes were small and there was a lack of replication of findings across studies
- Insufficient research on effects of key factors (e.g., immigration status, language exposure) on social-emotional development of DLLs.
Early Care and Education Practices

- Number of studies meeting criteria=27
- Studies were fairly evenly divided between those that relied on English interventions (55%) and those that incorporated the home language (44%).
- English only interventions produced positive effects in English (but few studies also measured outcomes in the home language).
- Interventions that incorporated the home language had mixed results. Some showed positive effects in English; some showed positive effects in the home language; and others showed positive effects in both.
- Overall, it is difficult to draw broad conclusions about the effectiveness of specific early care and educational interventions for DLLs, including language of instruction.
Early Care and Education Quality Measures

- Number of studies meeting criteria: 9
  - Number of studies varied from 1-5 for a given early care and education quality measure

- There was no evidence that these measures functioned differently for settings serving DLL children
  - Psychometric properties similar regardless of whether setting served primarily children who are DLL or only speak English
  - In general, see higher quality related to better outcomes regardless of DLL status

- It is not possible to draw conclusions about the validity of specific measures for use with DLLs, since there were few studies for any particular tool.

- Only two research studies included measures that were designed specifically for examining early care and education for DLL populations
Cross-Cutting Issues from Critical Reviews

• Methodological issues limit ability to draw conclusions.
  • Definition of DLLs inconsistent, missing, or relied on parent or teacher report.
  • Types of information collected on DLLs inconsistent across studies.
  • Sample sizes generally small.
  • Few longitudinal studies.

• Lack of valid & reliable assessment instruments standardized on DLLs.
Cross-Cutting Issues from Critical Reviews

- These reviews did not include:
  - theoretical or conceptual papers, technical research reports, dissertations, and international studies.

- More research is needed on:
  - DLLs birth to five, in particular infants and toddlers.
  - DLLs from language groups other than Spanish.
  - DLLs in home-based care
  - Contextual characteristics of early care and education
  - Impact of policies on practices with DLLs
ECLS-B Analysis: Factors Associated with DLLs’ Development

• Considerable variability in family characteristics by heritage group.

• Only a few differences in cognitive or social skills for DLLs vs. non-DLLs.
  • DLL children had few behavior problems and larger gains in reading over time as preschoolers,
  • DLL children also had lower cognitive scores as infants

• Maternal education differentially influenced development for DLLs vs. non-DLLs.
  • Maternal education was a weaker predictor of academic skills and stronger predictor of social skill for DLL families

• Outcomes for children whose mothers were immigrants vs. those who were native-born varied by child’s L1.
  • Fewer immigration differences emerged among DLL children than among non-DLL children

• There were larger gender differences favoring girls on cognitive outcomes among non-DLL than among DLL families
Policy & Practice Issues in Serving DLLs

- Listening sessions with researchers, practitioners, state administrators, & policy-makers.
  - Broad professional development opportunities needed for practitioners to promote DLLs’ learning & development.
  - Strategies needed to enhance recruitment & retention of qualified practitioners to work with DLLs & their families.
  - Strategies needed to improve access to & utilization of early care & education services by families of DLLs.
  - Methodological guidance needed for practitioners evaluate DLLs’ skills L1 & L2.
  - Need to recognize that DLLs’ growth & development occurs within larger contextual system.
Discussants

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Questions?
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http://cecerdll.fpg.unc.edu/