

Overview of Co-teaching Research

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Agenda

- Review of Empirical Literature on Co-teaching for Students with Disabilities (Cook et al. 2011)
 - Experimental Research
 - Non-experimental, Explanatory Research
 - Other Quantitative Research
 - Qualitative Research

How adequate is the research knowledge base?

- DLD/DR Alert: *Use with Caution (2001)*
- Most published literature is not empirical but “how to’s”
- Research is very difficult to conduct
- Rich description of co-teaching via interviews, observations, and focus groups
- Lacking evidence of effectiveness on academic and behavioral outcomes

Zigmond & Magiera, 2001; Zigmond, Magiera, Simmons, & Volonino, *in press*

Quantitative Research

- Meta-synthesis (Murawski & Swason, 2001)
- 89 articles reviewed
 - 6 provided sufficient quantitative information
 - Measured academic achievement, social and attitudinal outcomes.
 - Results: 0.40 effect size
 - Moderate effect size
 - Interpret with caution
 - Potential for positive results

Experimental Research

- *Side Note:*
 - None of the studies reviewed by Murawski & Swanson (2001) are true group experimental studies. However one was considered quasi-experimental (Cook et al, 2011)
- Fontana (2005) examined the effect of CT on English and math grades for students with LD.
 - Students with LD were randomly assigned to CT ($n=17$) or NCT ($n=16$) English and math class and all students also received one period of resource room support
 - Grades for students in CT classes increased significantly but not for students in NCT classes
 - Effect size: (d) = 0.81 for English grades
(d) = 0.40 for math grades

Experimental Research Cont.

- Murawski (2006)
 - 110 9th grade students (38 with LD)
 - Six English classes
 - Four conditions: (a) non-inclusive general education class, (b) two solo-taught inclusive classes, (c) two co-taught inclusive classes, and (d) one special education class.
 - Student placement based on student ability and family preference. However students with LD selected for an inclusive class were randomly assigned to inclusive co-taught ($n = 12$) or inclusive solo-taught ($n = 8$) class.
 - Results: No significant main effects
 - Cook et al. computed effect sizes on students with LD including $d = 1.15$ (spelling); 0.62 (reading comprehension); -0.49 (math); -0.51 (vocabulary); -0.95 (spontaneous writing)

Non-experimental, Explanatory Research

- *Side note:* Cook et al. (2011) considered five of the six studies in Murawski and Swanson's (2001) meta-analysis to be explanatory.
- Rea et al. (2002) compared outcomes for middle school students with LD from two schools: (a) practiced co-teaching ($n = 22$) and (b) used a pull-out model ($n = 36$).
- Results: Significant findings for grades, ITBS scores in language and math, and attendance; No significant findings for proficiency tests and school suspensions

Non-experimental, Explanatory Research cont.

- McDuffie et al. (2009) examined the differential effects of a peer tutoring intervention in co-taught and non-co-taught settings
 - In co-taught versus non co-taught classes
 - With and without classwide peer tutoring on science concepts and facts
 - 203 7th grade science students (62 of whom received special education services)
 - Results: Significant main effects for co-teaching on unit and cumulative posttests
 - Effect size for students with disabilities: (d) = 0.35 for unit tests; 0.29 for cumulative test

Other Quantitative Research

- Observational studies
 - Mageria & Zigmond (2005) observed instructional experiences of students with disabilities in 11 co-taught classrooms.
 - Conducted observations when both teachers were present and when only the general education teacher was present.
 - Results: students with disabilities interacted significantly less with the general education teacher but received significantly more individual instruction during co-teaching.
 - McDuffie et al. (2009) found the opposite to be true. Students in a solo-taught class interacted more with the teacher than students in co-taught classes.

Other Quantitative Research

- Magiera et al. (2005) conducted observations in 20 co-taught secondary math classes.
 - Results: Dominant instructional arrangements included (a) both teachers monitoring seatwork, and (b) one lead/one support model. Team teaching only occurred in 9 of the 49 observations.
- Harbort et al. (2007) found similar results. General education teacher leads the instruction; one lead/one support model used exclusively.
- Zigmond and Matta (2004) and Murawski (2006) reported similar results.

Qualitative Research

- Co-teaching Meta-Synthesis
 - (Scruggs, Mastropieri, & McDuffie, 2007)
- Research Questions:
 - How is co-teaching being implemented?
 - What are perceptions of teachers?
 - What problems are encountered?
 - What benefits are perceived?
 - What factors are needed to ensure success of co-teaching?

What do studies represent?

- Co-teachers represented a wide variety of geographical areas, locations (urban, rural, suburban), and grade levels
 - 454 co-teachers
 - 15 elem ; 14 secondary
- Schools were chosen as “typical,” “representative,” or “outstanding” (10) in implementing co-teaching
- Present sample may be somewhat more successful than the overall co-teaching population.

Conclusions

- Co-teaching has great potential for promoting the effective inclusion of students with disabilities.
- Many teachers, students, and administrators report satisfaction with the efficacy of co-teaching.
- In many or most cases, special education teachers do not participate as full partners in the co-teaching enterprise, but function more as “support” personnel.
 - This difference is increased when there is a difference in content knowledge.
- In many or most cases, inclusive co-taught classes operate similarly to typical general education classes.

Conclusions cont.

- Students with disabilities receive additional attention, but do not receive instruction in specific academic and behavioral strategies more typical of special education classes.
- If present data are representative of co-taught classrooms, co-teaching is not generally being implemented as originally envisioned.
- Schools should re-double efforts to engage participation of both teachers as full partners in the co-teaching process.
- Administrative support, time for planning, and screening for co-teacher compatibility are important issues that should be carefully considered.

Summary of Research

- Co-teaching typically involves the use of one lead/one support model
- Special education teachers feel under-utilized
- Instruction is seldom individualized nor does it incorporate research-based practices
- Student-teacher interaction is not increased through co-teaching
- Mixed results on improvement for academic and behavioral outcomes

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