

CLASSWIDE PEER TUTORING

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ABSTRACT: ClassWide Peer Tutoring is an instructional strategy developed to help teachers individualize instruction, while still providing students with ample opportunity to become actively engaged during instruction. In CWPT, class members are organized into student tutor pairs. Each earns points for completing their role competently. Students change roles during the day, sometimes performing as the student and sometimes as the tutor. CWPT provides the opportunity for students to practice and master what they are learning while encouraging positive social interaction among students. Twelve years of data indicate that at risk students and students with disabilities in programs using CWPT acquired literacy skills at a faster rate, retain more, and made greater advances in social competency than with a variety of standard instructional methods. Need for special education placement, as well as number of dropouts, decreased.

Background

The ClassWide Peer Tutoring program (CWPT) is the product of more than 15 years of applied research and development. Originally developed in local schools in Kansas City, Kansas, by researchers Joseph Delquadri, Charles Greenwood, and third grade teacher, Kathleen Stretton, CWPT has seen continuing development, replication, evaluation, and publication supported by 15 private and federal grants from the National Institute of Child Health and Human Development and the Divisions of Innovation and Development and Personnel Preparation, Office of Special Education and Rehabilitation Services, U.S. Department of Education.

This research has sought to improve the literacy of children in inner city schools who are poor, have mild disabilities, and who are culturally diverse. The net product of this research has been the ClassWide Peer Tutoring program, or CWPT, (Delquadri, Greenwood, Whorton, Carta, & Hall, 1986; Greenwood, Carta, Kamps, & Hall, 1988) and a knowledge base of published articles consisting of over 34 small and large scale experimental studies on its effectiveness.

These studies have ranged from use in a single classroom with a single subject matter such as spelling during a school year (Delquadri, Greenwood, Stretton, & Hall, 1983) to a 12 year longitudinal study including 416 students from 9 schools involving regular education classes in reading, spelling and arithmetic (Greenwood, Delquadri, & Hall, 1989; Greenwood & Delquadri, 1995). CWPT has been

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replicated independently in different school districts and institutions of higher learning across the country and in several foreign countries.

In recent years, CWPT has become a prototype for instructional designs that are inclusive of students of diverse ethnic and cultural backgrounds, with and without disabilities. It has also become an important element in teacher preparation programs in regular and special education.

Program Description

CWPT is used to ensure that students are actively engaged during academic instruction. At the elementary school level, it is designed to supplement traditional instruction and to replace seat work, lectures, and oral reading group activities. At the secondary level, it is intended to focus students' practice, skill building, and review.

To use CWPT, the teacher organizes individual class members into tutor student pairs who work together on two "competing" teams. Students earn points for their team by responding appropriately to the tasks presented by their tutors. Tutors earn points from the teacher based on their implementation of the tutoring role.

Teachers are assisted in implementing CWPT by a manual (Greenwood, Delquadri, & Carta, 1997) describing the basic procedures used:

- (a) how to introduce and review new material to be learned,
- (b) which unit content materials will be tutored,
- (c) how to re-assign new partners each week,
- (d) how to select partner pairing strategies,
- (e) how to carry out reciprocal roles in each session,
- (f) how teams compete for the highest team point,
- (g) how students earn individual points,
- (h) how tutors provide immediate error correction,
- (i) how to post individual and team scores,
- (j) how to use social rewards for the winning team.

Added to these *core procedures* are procedures teachers use with specific subject matter. For example, during passage reading, students read brief passages from the curriculum to their tutor. The tutor gives points for correctly read sentences and provides error correction as needed. The classroom teacher assesses the fluency of the students' reading using oral reading rate measures after tutoring. When used to teach reading comprehension, students answer who, what, when, where, and why questions and receive feedback about their answers. When applied to spelling, the student writes and spells words orally on a list as they are dictated by the tutor. The tutor then corrects the responses. Similar variations are applied to vocabulary, mathematics, silent reading, as well as to seat work.

CWPT includes features that enhance its usefulness with students with disabilities and for school wide application. It enlists the help and influence of the classroom peer group in the teaching process. Rewards of individual performance in CWPT depend not just on the performance of individuals but on the collective

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performance of partners and teams. Changing tutor student pairs on a weekly basis and changing roles within daily sessions keeps students motivated and provides the opportunity to learn the social and teaching skills needed in the teaching role. This also helps to improve socialization between students.

Building and system level procedures are also available to support the broader context for CWPT programs (Greenwood, Terry, Delquadri, Elliott, & Arreaga-Mayer, 1995). Interactive CD ROM materials are currently being developed to assist with initial teacher training. Computer software is available for recording and graphing students' points earned and weekly achievement on material taught (Greenwood & Liang-shye Hou, 1997). Adaptations are being developed for use with students with mental retardation, limited English proficiency, and autism/behavior disorders.

Evaluation

CWPT research has shown that students at risk and with mild disabilities acquire literacy skills at a faster rate, retain more of what they learn, and make greater advances in social competence when using CWPT compared to such standard instructional methods as teacher-student discussion, lectures, seat work, and the use of overhead projectors. This research (Greenwood, 1996) has addressed the issue of what works best (effective components) for which students (e.g., LD, low-achieving non-LD), how it can be applied widely within local schools (administrative model), and the role of technology (communication, training, and implementation of quality information).

Perhaps the most dramatic findings have come from the 12-year experimental longitudinal study. Results indicated that CWPT, compared to at-risk and non-risk groups who did not receive CWPT:

- increased students' engagement during instruction, grades 1 to 3 (Greenwood, 1991),
- increased growth in student achievement at grades 2, 3, 4, and 6 (Greenwood, 1991; Greenwood et al., 1989; Greenwood, Terry, Utley, Montagna, & Walker, 1993),
- reduced the number of CWPT students needing special education services by 7th grade (Greenwood et al., 1993),
- reduced the number of dropouts by 12th grade (Greenwood & Delquadri, 1995).

Consumers have frequently reported CWPT to be acceptable and useful:

This model [CWPT] has impacted over 500 students and 65 teachers, both regular and special education throughout the district. . . . It has resulted in students making greater gains both academically and socially compared to traditional pull-out models. Quality implementation, finding the time to provide training, new methods of assessment, and evaluating student progress are pressing issues in our district addressed by CWPT. We must refine, not reinvent our current knowledge and practice. This project provides the technology and the resources needed to make it happen. (Inclusion Coordinator)

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We have used CWPT at every grade level with outstanding results. We have full inclusion of our special education population in regular education settings . . . we continue to struggle with collaborative decision making, improvement in data management, and refinement of methods of assessment of student progress. Teachers use CWPT for reading and spelling in both literature and content settings. I have applauded [Juniper Gardens'] focus on academically engaged time and the pragmatic approaches suggested for increasing that. The results indicate that those strategies have merit." (Elementary School Principal) (See also Fiore & Becker, 1994.)

In conclusion, this work collectively provides a number of lessons learned regarding improving classroom instruction and student academic outcomes. First, it simultaneously addresses the teaching of both academic and social skills and it is an acceptable means of establishing social relationships between and among diverse groups of students. Second, because it addresses issues such as heterogeneity, inclusion of students with mild disabilities, noncategorical special education, and performance-based formative assessment, it offers a research-based solution to issues raised by school reformers. Third, this work is an excellent demonstration of how applied research on an educational practice can be used to improve academic outcomes in local schools in terms of indices (achievement, program placement, and school completion) of major importance to parents, schools, and policy makers.

REFERENCES

- Delquadri, J., Greenwood, C. R., Stretton, K., & Hall, R. V. (1983). The peer tutoring game: A classroom procedure for increasing opportunity to respond and spelling performance. *Education and Treatment of Children*, 6, 225-239.
- Delquadri, J., Greenwood, C. R., Whorton, D., Carta, J. I., & Hall, R. V. (1986). ClassWide peer tutoring. *Exceptional Children*, 52, 535-542.
- Fiore, T. A. and Becker, E. A. (Eds.) (1994). *Promising classroom interventions for students with attention deficit disorders*. Research Triangle Park, NC: Center for Research in Education, Research Triangle Institute.
- Greenwood, C. R., (1991). Longitudinal analysis of time, engagement, and achievement of at risk versus non risk students. *Exceptional Children*, 57(6), 521-535.
- Greenwood, C. R., (1996). Research on the practices and behavior of effective teachers at Juniper Gardens Children's Project: Implications for the education of diverse learners. In D. Speece & B. K. Keogh (Eds.), *Research on classroom ecologies: Implications for inclusion of children with learning disabilities* (pp. 39-67). Hillsdale, NJ: Lawrence Erlbaum.
- Greenwood, C. R., Carta, I. I., Kamps & Hall, R. V. (1988). The use of ClassWide peer tutoring strategies in classroom management and instruction. *School Psychology Review*, 17, 258-275.
- Greenwood, C. R., & Delquadri, I. (1995). ClassWide peer tutoring and the prevention of school failure. *Preventing School Failure*, 39, 21-25. <http://dx.doi.org/10.1080/1045988X.1995.9944638>
- Greenwood, C. R., & Delquadri, I. (in preparation). *The ClassWide peer tutoring interactive CD*. Kansas City, KS: Juniper Gardens Children's Project, University of Kansas.
- Greenwood, C. R., Delquadri, J., & Carta, I. I. (1997). *Together we can! ClassWide peer tutoring to improve basic academic skills*. Longmont, CO: Sopris West.
- Greenwood, C. R., Delquadri, I., & Hall, R. V. (1989). Longitudinal effects of ClassWide peer tutoring. *Journal of Educational Psychology*, 81, 371-383. <http://dx.doi.org/10.1037/0022-0663.81.3.371>

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- Greenwood**, C. R., & Liang-shye Hou. (1997). *The ClassWide peer tutoring learning management system (CWPT-LMS)*. (Version 1.0). Kansas City, KS: Juniper Gardens Children's Project, University of Kansas.
- Greenwood, C. R., Terry, S., Delquadri, J., Elliott, M., & Arreaga-Mayer, C. (1995). *ClassWide peer tutoring (CWPT): Effective teaching and research review*. Kansas City, KS: Juniper Gardens Children's Project, University of Kansas.
- Greenwood, C. R., Terry, S., Utley, C. A., Montagna, D., & Walker, D. (1993). Achievement, placement, and services: Middle school benefits of ClassWide peer tutoring used at the elementary school. *School Psychology Review*, 22(3), 497-516.