

#### Introduction

Peer-tutoring "is a very old practice, traceable back at least as far as the ancient Greeks" (Topping, 1996). It is used from a very long time in Britain: 200 hundred years ago, Bell and Lancaster used extensively this type of education.

In 1960, peer tutoring it started to be used on a large scale in USA (Topping, 2001). There are many studies done which prove the fact that peer tutoring has a dramatic effect in developing the reading and writing skills of young students. National Commission on Resources of the Youth, Inc. (NCRY), in their first study in 1967 in Newark (New Jersey), and in Philadelphia (Pennsylvania), called Youth Tutoring Youth, show in their results that not only young students increased their reading skills with up to 3.5 years age equivalency but, that also, increased their personal adequacy (Goodlad & Hirst, 1989).

Peer-tutoring is defined by an activity of collaboration in which participants develop a coordinated process for reaching a joint outcome. Even though some past researches show that not all types of peer exchanges create productive learning openings (Van Keer, Hilde & Verhaeghe, 2001), peer-tutoring increases "the social knowledge" construction and self-reflection" (Kumpulainen & Kaartinen, 2003).

The two major categories of peer-mediated intervention is peertutoring and cooperative learning, where "cooperative learning describes a variety of programs in which children work together to reach the goal of simultaneous learning" (Fantuzzo & Rohrbeck, 1992).

Cooperative learning, as a successful teaching strategy, is used for students from the same age, with different levels of ability, to have a common learning activity in order to improve their understanding of a given subject. The studies done show that cooperative learning considering proper task structure, reward structure (positive reward interdependence) and the authority structure will lead not only to a good student performance but also to a better student-teacher collaboration (Slavin, 1980).

#### Theory

Based on cooperative learning Peer Tutoring and Personal Adequacy (PTPA) is a proposed program in which young students are directly (e.g. academic rewards, recognition, academic achievements) and indirectly (e.g. teachers' support, school programs, balanced ecological system) rewarded for their endeavor on doing peer-tutoring with younger students. PTPA can have a significant result, driven through a personal adequacy, not only for the cooperative learning but also for the entire educational system.

Educational system is mainly based on influence: the child is influenced by the teacher, and the teacher's reactions are influenced by the child's temperament; these exchanges of influences define the beliefs, and automatically the expectations and behavior, in the student-teacher interaction (Rudasill & Rimm-Kaufman, 2009). PTPA, by giving the student a possibility to be integrated in the system of education, as playing the role of teacher for younger peers, will also shape the student's understanding and behavior toward the complex relation with the teacher. This understanding can create a positive outcome for student-teacher influence.

The age and gender differences in children have a strong influence toward their relationships; conflict arising mostly in peer interrelations (Furman & Buhrmester, 1985). PTPA, opening not only a close gender relation but also a close relation between different ages, can reduce the conflicts in peer interrelation. Students tutoring younger peers, developing personal adequacy defined by their work with tutees, can influence their understanding about teaching efforts (possibly increasing their respect for teachers) and also will positively change their behavior in treating younger students.

# **Peer Tutoring and Personal Adequacy in Elementary** and Secondary Schools

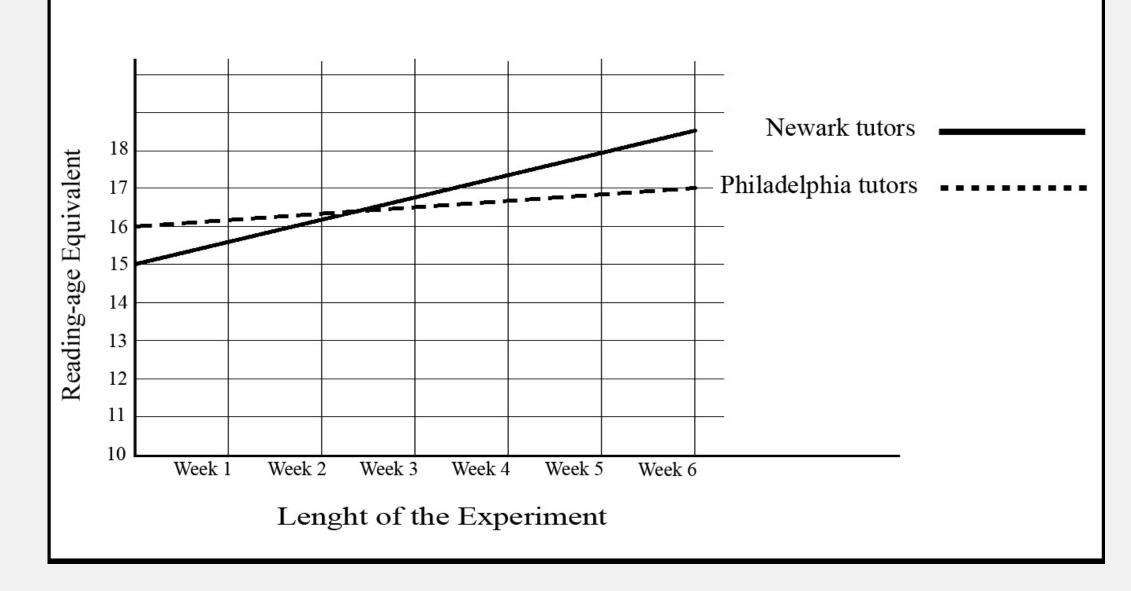
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## Studies to support PTPA

The theory of PTPA was constructed based on many studies done in peer tutoring, as the literature review shows. I will present 3 studies that I find to be supporting of PTPA.

The Youth Tutoring Youth program, done in 1967 by NCRY, showed a significant result in personal adequacy, program presented by Goodlad & Hirst (1989) in "Peer tutoring: a guide to learning by teaching":



"[T]wo hundred fourteen – and fifteen-year-old children who were not achieving well in school, and who had fallen below grade level in reading, were trained to serve as tutors for elementary-school children from disadvantaged neighborhoods. In Newark, non-professional [black] women of the neighborhood acted as supervisors of groups of tutors and tutees; in Philadelphia, the program was more closely linked with the school system. The idea behind the project was not only that teaching is a most powerful learning experience, but also the teaching gives a sense of being needed (my emphasis). The tutors were paid \$1.25 an hour for 22 hours of work each week – 16 hours of tutoring and six hours of training. In Newark, 80 tutors were divided into six groups, each group working under a member of the community who acted as a tutor-supervisor. The tutors concentrated on one school with four tutees per tutor. In Philadelphia, 120 tutors, in groups of 20 worked at six schools, each group of tutors being supervised by a certified teacher and a young teacher-aide. Tutoring sessions were two hours long, broken by a 'snack' break. The tutoring went for six weeks." (38)

The Newark tutors, who were certainly under-achieving students, showed significant increased reading skills: "reading-age equivalent leapt 3.5" years" (38). The Philadelphia tutors did not fit exactly in the study's criteria of reading failure and that is why their result shows only one year increase in reading skill. The study registered an attrition effect, but there were only 7 students that left the study for illness or because they found a better-paid job. The importance of this study resides in the qualitative effect it had over the tutors: they expressed care and excitement in working with their tutees, and not only. The tutors gained "a sense of work-responsibility, an appreciation of learning, improved literacy skills, and the motivation to work and to stay in school" (38). This qualitative result supports the theory at the base of PTPA program

The second study which sustains PTPA is "Cooperative Learning and Achievement: Theory and Research." (Slavin, Hurley & Chamberlain, 2003). This article shows that "task motivation" is the key to success in education. "The motivationalist perspective presumes that task motivation is the single most impactive part of the learning process, asserting that the other processes such as planning and helping are driven by individuals' motivated self-interest." (178). Slavin et al. show this diagram of functional relationship of interactions in group learning, which is self-explicative:

## Contact Information and Acknowledgements

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Functional relationship among the major interaction components of group learning

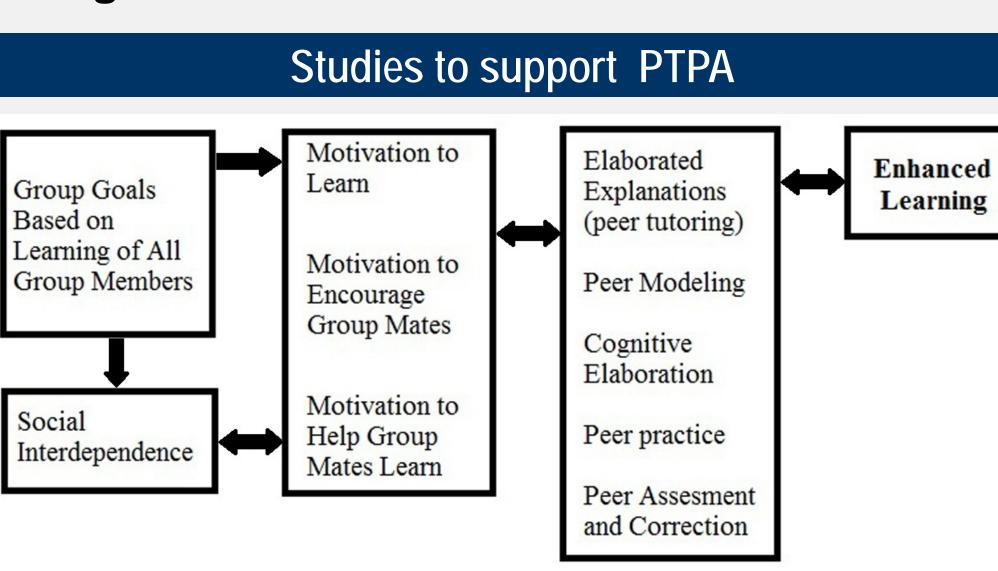
perspectives: 1. Motivational Perspectives – "presumes that task motivation is the most important part of the process and hold that the other processes are driven by motivation." (179) 2. Social Cohesion Perspectives – "students will engage in the task and help one another learn because they identify with the group and want one another to succeed." (180) 3. Cognitive Perspectives – "interactions among students will in themselves increase student achievement for reasons that have to do with mental processing of information rather than with motivations." (182) 4. Development Perspective – "interaction among children around appropriate tasks increases their mastery of critical concepts." (182). Developmental perspective is due entirely to the use of cooperative tasks, which will develop opportunities for students "to discuss, to argue, and to present and hear one another's viewpoints" (183). Based on this perspective, Damon (1984, p.335) proposed a "conceptual foundation for a peer-based plan of education": a. "Through mutual feedback and debate, peers motivate one another to abandon misconceptions and search for better solutions.

b. The experience of peer communication can help a child master social processes, such as participation and argumentation, and cognitive processes, such as verification and criticism.

c. Collaboration between peers can provide a forum for discovery learning and can encourage creative thinking." (183)

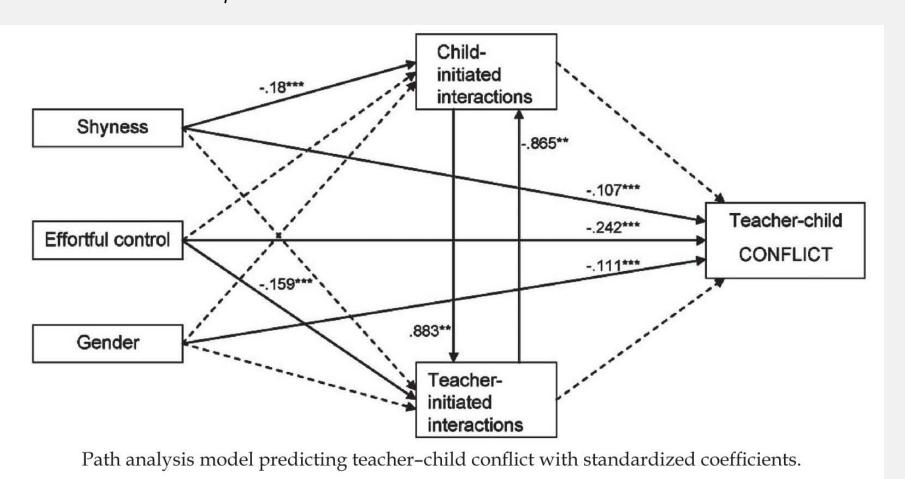
The theory supported by this study not only proposes peer interaction with students from the same classroom but, as PTPA postulates, it sustains that tutoring of younger students by older ones would be efficient as well.

The third article chosen to justify PTPA is "Teacher-child relationship quality: The roles of child temperament and teacher-child interactions" (Rudasill & Rimm-Kaufman, 2009). This article includes the research which studied the causes and levels of child-teacher conflict based on child's temperament and gender. The first diagram presents that boys with lower shyness, lower effortful control were likely to have more conflict with teachers,



The concept behind this diagram is formed by four major theoretical

d. Peer interaction can introduce children to the process of generating ideas.



where girls with lower shyness, higher effortful control were more likely to have close relationships with teachers:

Shyness

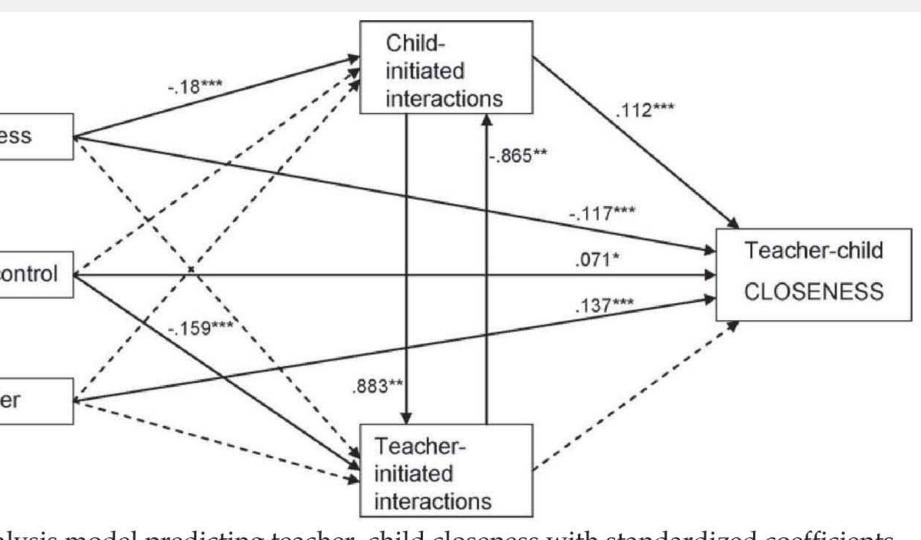
Effortful contro

Gender

PTPA will be more efficient if it will become a required course such as reading, writing, math, etc. Along the years students will develop a better social skill in helping others.



#### Conclusions



Path analysis model predicting teacher-child closeness with standardized coefficients.

As PTPA proposes, when older children are assuming the teacher's role in peer tutoring interactions with younger ones, developing the understanding of what it means to be a teacher, not only will decrease in child-teacher conflict and increase in child-teacher closeness but they will also transmit this behavior to their tutees.

To implement Peer-Tutoring and Personal Adequacy into elementary and secondary schools does not require too much spending: the school setting has everything that PTPA needs:

- Older students (as tutors) and younger students (as tutees);

- Teachers who can adapt, improve and, supervise the program, raising trained tutors;

PTPA is a program that can start from the first year elementary school, beginning with collaborative training for first grade children to get accustomed with the concept of helping others. As the literature shows, peer training is used since antiquity; therefore, there are already good models for teachers today. The only new thing that PTPA brings to life is the teacher role-play for children as a habituated modality of learning. PTPA program will integrate children into the education system motivating them to participate beside teachers in the process. As the research is showing, the younger the children are, the easier it is to get accustomed to collaboration, to help others. Also, starting from an early age to help others, children will see their tutoring duties more like reciprocal peer teaching, rather than having a position of superiority (Fantuzzo, & Rohrbeck, 1992).

The typology of tutoring, as part of PTPA program, can be constituted as close as Topping (1996) describes it:

1. Curriculum Content - may be knowledge and skills orientated;

2. Contact Constellation - some projects operate with one tutor working with a group of tutees, but the size of group can vary from two to thirty or more;

3. Year of Study – tutors and tutees are from different years of study;

4. Ability - while many projects operate on a cross-ability basis, there is increasing interest in same-ability tutoring;

5. Place- Peer tutoring may vary in location of operation;

6. Time - peer tutoring should be scheduled outside regular class time; it will be more appropriate to be integrated as a course;

7. Tutor Characteristics – include not only students with good grades (as it has been done traditionally), but emphasis should be on students with lower grades who would benefit greatly (as studies show) from becoming tutors.

8. Objectives – "projects may target intellectual gains, formal academic achievement, affective and attitudinal gains, social and emotional gains, self image and self concept gains, or any combination. Organizational objectives might include reducing dropout, increasing access, etc." (322-323)

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