

## BROOKLINE EDUCATION FOUNDATION

Grant Application for 2009-2010 Academic Year

Cover Page

**Type of Grant:** Teacher Grant

**Are you applying for the Charlie Baker Legacy Award?** NO

**Project Title:** *Using Yoga to Improve Self-Regulation, Motor Skills & Communication in Young Children with Special Needs*

**Project Leader(s)/Organizer(s):** Merrill Forman, Occupational Therapist & Andrea Schuettler, Speech & Language Pathologist

Name: Merrill Forman School: Brookline Early Education Program (BEEP)/Lynch Center  
Grade: Early Childhood (preschool and prekindergarten)

Home Telephone: 781-862-0501 E-mail addresses: [Merrill\\_Forman@brookline.k12.ma.us](mailto:Merrill_Forman@brookline.k12.ma.us) or merrillforman@gmail.com

Position/Department/Teaching Area: Occupational Therapist/Special Education/Brookline Early Education Program

Years teaching in Brookline: 22 Years teaching: 22

Name: Andrea Schuettler School: Brookline Early Education Program (BEEP)/Lynch Center  
Grade: Early Childhood (preschool and prekindergarten)

Home Telephone: 781-582-1732 E-mail address: [Andrea\\_Schuettler@brookline.k12.ma.us](mailto:Andrea_Schuettler@brookline.k12.ma.us) or aschuettler@gmail.com

Position/Department/Teaching Area: Speech & Language Pathologist/Special Education/Brookline Early Education Program

Years teaching in Brookline: 11 Years teaching: 11

For Teacher Grants Only: Have any of the applicants ever applied for a Brookline Education Foundation grant?  
YES. Projects were not funded.

**Project Period:** August 9-14, 2009

**Amount Requested** \$ 1820

**Acknowledgement of Project Leaders:** Merrill Forman & Andrea Schuettler Date: 3/12/2009

We understand that, should the Brookline Education Foundation fund our grant application, we are obligated to submit a written evaluation of my/our project at its completion. Evaluations of projects completed during the summer will be due by December 31, 2009. Evaluations of projects completed during the school year will be due by May 31, 2010. We further understand that only educators employed by the Brookline Public Schools at the time the project is undertaken are eligible to receive funds.

For online submissions, please acknowledge that you have read and agreed to the above statement.  X

# BROOKLINE EDUCATION FOUNDATION

Grant Application for 2009-2010 Academic Year

Project Description Section

## 1. Project Summary

**Every Kid's Yoga: Teaching Yoga to Children with Special Needs** is a 5-day teacher-training program designed to help children with challenges discover the many benefits of yoga ([www.everykidsyoga.com](http://www.everykidsyoga.com)). In this workshop participants will learn a variety of yoga-based techniques to support and enhance other therapeutic modalities (occupational therapy and speech and language therapy) resulting in improved learning and school performance. This yoga teacher training will provide ideas to address issues associated with disabilities such as Autistic Spectrum Disorders, Sensory Processing Disorders, Speech and Language Based Learning Disabilities and Attention Deficit Hyperactivity Disorder.

## 2. Goal Statement

Yoga has been shown to increase self-regulation, improve focus and attention, develop self-confidence and provide a fun form of exercise for children. Both the fields of occupational therapy and speech and language pathology have published articles extolling the virtues of using yoga as a treatment modality for children with special needs (articles available upon request). We have been using yoga (poses and breathing techniques) in the classroom activities we have been doing with our early childhood students with Autism Spectrum Disorders (ASD). Current research examining the use of yoga with children on the autism spectrum and other children with special needs has resulted in positive outcomes. The autism diagnosis has exploded in recent years. According to the Center for Disease Control, nationwide 1 in 150 children are currently receiving this diagnosis. Approximately 10% (30/290) of the students in the Brookline Early Education Program (BEEP) have an ASD diagnosis. Yoga is a natural 'fit' for our students with autism for many reasons. Yoga addresses many of the challenges individuals with autism face in an active, fun way without negative side effects or expensive equipment. Additional support for doing yoga with students with autism are:

- Yoga can be done anywhere.
- Yoga is very visual (a strength for many people with autism). It does not rely on complex language or instruction but only a pose demonstration or use of a picture or photograph.
- Yoga impacts self-regulation so it can help decrease anxiety and stress, oftentimes a debilitating secondary feature of autism. Many of the poses require a change in head position or deep pressure, both inputs that can be calming and organizing.
- Yoga teaches breathing techniques that can impact arousal levels and can be generalized across setting and situations.
- Many children with autism display stereotypic motor movements such as hand flapping. These motions often occur if the child is excited, agitated or overwhelmed by events in the environment. Yoga works to soothe the nervous system by using controlled movement and breathing, decreasing these extraneous movements.
- Yoga is done slowly and is very repetitive; two teaching strategies that often benefit children with autism.
- Yoga is best done in a low stimulation environment, with dim lights, soft music or silence, on a clearly defined space (mat), again all beneficial environment features for individuals with autism.
- Yoga does not require eye contact, a verbal response, or forced interactions, so the student can just concentrate on the poses and breathing.
- The philosophy of yoga encourages people to work at their own level and abilities.
- Yoga honors individual differences.

It is with this information paired with our desire to make our therapeutic interventions address the whole child thus allowing each student to reach their full learning potential that we hope to further develop and refine our techniques and enhance our educational programming in each of our respective disciplines. Not only would this program be beneficial to each of us professionally, but it would also facilitate our teacher training through our classroom modeling, regularly scheduled consultations and the professional development teacher trainings we

could offer.

BEEP provides school based social skills groups for young children with ASD. This year we have been running a weekly group for several classes addressing social skill development and self-regulation. Throughout the year we have incorporated yoga in our lessons to enhance attention to task, help with focus and organization, further language development, calm and organize and ultimately increase social engagement and learning for our students. Parents have reported that the children have been practicing the poses at home and we have witnessed students generalizing breathing techniques during stressful situations in the classroom. Our current programming has been developed by using yoga books and DVD's. We had hoped to get more structured yoga teacher training for children with special needs with an integrated cross-disciplinary approach.

The goal of this **Every Kid's Yoga** training is to help us develop a systematic, integrated, interdisciplinary method of enhancing a child's ability to learn through the use of yoga. Using yoga with children with special needs directly aligns with the Core Values of the Brookline Public Schools. *High Achievement for All* can be attained when children are provided with a program that allows for structure and continuity, language stimulation, physical stimulation, opportunities for self-calming activities, social interactions and direct self-esteem building, all outcomes achievable with yoga. *Excellence in teaching* is achieved when we are truly reaching and tapping into each child's innate desire to learn by providing them with the tools, strategies, and state of readiness to do so. *Collaboration* between professionals and use of yoga techniques can be used throughout the day for self-regulation, teaching math concepts, literature activities and therapies. *Respecting human differences* is done best when the whole child is nurtured and given the best possible opportunities to express themselves and interact with others as a thriving, contributing member of their classroom. Finally, *Educational Equity* can truly be achieved as yoga can be done with very little space, materials or money. Children of all backgrounds can participate and use yoga without the need for uniforms, expensive equipment or a fee based class.

### 3. Context

a. This is a new project.

b. Research has supported the co-treatment model of therapeutic collaboration between speech and language pathologists and occupational therapists. For example, it is well documented that using movement facilitates language production. Occupational therapists determine what kinds of movement input (speed, direction, rhythmicity, timing) will be beneficial for different sensory systems. A child who has a very low arousal level may benefit from fast, irregular movement. This child may have difficulty attending and may be given a 'movement break' before facing an opportunity in school requiring sustained concentration, focus and language expectations. Oftentimes this 'movement break' will facilitate increased communication (verbal output, sign language, gestures, eye contact, engagement, etc.). At this point the speech and language pathologist can help to functionally shape that language production to meet the learning demand in the classroom.

Speech and Language Pathologists (SLP) provide therapy to both social skills and integrated early childhood classrooms, working with children diagnosed with a variety of needs and disabilities. The primary goal of an SLP is to help each child develop the necessary skills to communicate to the best of their ability. One of the biggest challenges for children with ASD and a variety of other diagnosis is the ability to regulate one's self such that communication can occur. For our students in the social skills groups, the primary therapeutic focus is the social pragmatic aspects of language. Pragmatic language skills are the nonverbal aspects of communication (facial expression, gestures, hand movements) and also include skills such as initiating, turn taking and sustaining interactions. For children who are continually challenged by self-regulation abilities, these skills can be difficult to develop. Working collaboratively with the occupational therapist provides invaluable insight and support with regards to a child's sensory system and strategies that can facilitate adequate self-regulation.

Occupational therapists in an early education setting facilitate sensory motor development in children including motor skill development, strength, balance, coordination and sensory processing. Over the February 2009 school

vacation, Merrill received 24 hours of yoga teacher training through a well-known children's yoga program called YogaKids ([www. Yogakids.com](http://www.Yogakids.com)). YogaKids was developed over the past 20 years primarily for typically developing children. It believes in educating the whole child by using yoga as a pathway to learning by using as its foundation the Multiple Intelligence Theory of Dr. Howard Gardner, the Hobbs Professor of Cognition and Education at Harvard University's Graduate School of Education ([www.howardgardner.com](http://www.howardgardner.com)). Each pose becomes a "springboard for integrated learning activities that explore health, science, math, language, music, art in a playful way." ([www.yogakids.com](http://www.yogakids.com)). The efficacy of the YogaKids program has been supported by research at Indiana and Purdue Universities (Buckenmeyer & Freitas, 2007). Merrill would like to further develop her yoga teacher training to include adaptations for students with special needs.

#### **4. Project Description**

Both participants will attend the 5-day **Every Kid's Yoga: Teaching Yoga to Children With Special Needs** at the Kripalu Center in Lenox, Massachusetts from August 9 – August 14, 2009.

[http://www.kripalu.org/program/view/EKY91/every\\_kids\\_yoga\\_teaching\\_yoga\\_to\\_children\\_with\\_special](http://www.kripalu.org/program/view/EKY91/every_kids_yoga_teaching_yoga_to_children_with_special))

This experiential hand-on training will include lectures, demonstrations, manual review, and opportunities to practice course content with other participants. We will learn how to structure a class for a variety of challenging behaviors, learn how to teach breathing and relaxation techniques, address speech & language challenges, support sensory differences, use visual supports which benefit a variety of diagnosis, integrate props/music/singing/partner poses, learn ways to modify postures, and help us clarify our vision for teaching yoga to children with challenges.

#### **5. Outcomes**

We have already seen the direct benefit of using yoga as a part of our therapeutic programming with our young students with special needs. The anticipated outcome of this project would be for us to receive formal training by learning a systematic and integrated therapeutic approach to teaching yoga for use within our early childhood programs. We want our students to present with improved self -regulation, focus, organization and 'availability', all necessary prerequisites for learning. Our hope is that using yoga with our students and through collaboration with other Brookline Early Education educators, we will directly improve the education of all Brookline early childhood students. This project will allow us to enhance our respective knowledge base and view our students through an expanded lens, providing them with an additional way to access the curriculum and excel. As two seasoned therapists, we look forward to adding a new proven tool to our therapeutic repertoire as well as having an additional content area for teacher/parent consultation.

#### **6. Evaluation and Dissemination**

We plan to share the results and evaluate our program in the following ways:

- Surveys to teachers and parents with behavioral observations we hope to target
- Collaboration with the Autism Specialist to track and measure observable behavioral differences in children before/after doing yoga
- Parent newsletter and workshop to discuss what techniques and methods have been used, why and ways to carryover at home
- Teacher in-service training such as a professional development workshop to include topics such as explanations about what we are doing, descriptions of the beneficial educational outcomes of doing yoga with young children, and demonstrations of techniques that could be implemented throughout the school day with all students
- Opportunities for teachers to create supplemental materials for classroom use - i.e. computer photos of yoga poses to mount on a wall for a 'yoga break ' classroom corner, weighted equipment such as a lap or eye pillow for relaxation, calming music, social stories, progressive muscle relaxation scenarios

**BROOKLINE EDUCATION FOUNDATION**

Grant Application for 2009-2010 Academic Year  
Budget and Finances Section

**Budget .**

<b>Expense</b>	<b>Purpose</b>	<b>Cost</b>
A. Stipends (BPS rate)		\$
B. Consultant (include name and rate)		\$
C. Materials and Supplies (\$90 for training manual x 2)		\$ 180
D. Travel - Accommodations for 5 nights (\$420 x 2 includes room & board)		\$ 840
E. Conference Fee (\$400 x 2)		\$ 800
F. Other		\$
G. Substitutes (please indicate days/hours needed; might be part of total cost)		\$
<b>TOTAL</b>		<b>\$ 1820</b>

**Finances**

- a. There will not be any additional funding from other sources.
- b. At the present time, we do not anticipate any additional resources would be needed.
- c. We do not anticipate any potential obstacles or challenges, unless a parent has an objection to the use of yoga in school. If this occurs, we can meet with the parent to demonstrate exactly what we will be doing, explain why and also cite some of the research articles we have found which emphasize the positive behavioral outcomes of doing yoga with children.
- d. We would not be able to do this present project as envisioned without this funding. If partial funding were available we may be able to find a less expensive yoga teacher training for children with special needs. There are several other programs available however they do not provide the cross-disciplinary approach this training offers.

-----  
Dear Brookline Education Foundation Grant Reviewer,

Thank you very much for considering our proposal. We are very excited about the possibility of attending this yoga training as a therapy team. We look forward to your feedback and response. We have tried to thoroughly explain our plans, but please let us know if you have any questions or need any clarification.

Sincerely,

Merrill Forman & Andrea Schuettler