

# Developing a Program to Train Educators on Red Flags and Remediation for Promoting Normal Development in Elementary Children



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## OVERVIEW OF CAPSTONE SITE

St. Andrew's Episcopal School is a private institution that is funded by tuition from the students each year. It is accredited by the Southern Association of Colleges and Schools (SACS) and belongs to the National Association of Independent Schools (NAIS). The average student to teacher ratio in the NAIS is 8.6:1, and the median class size is 15 students. The Lower School population is students ages Pre-K3 – 4<sup>th</sup> grade. The curriculum builds on skills introduced in Early Childhood and uses an active, hands-on approach that makes learning exciting, fun, and contagious. A spirited, family-like atmosphere balances the academic, artistic, and social-emotional aspects of education, resulting in happy, selfconfident student. The mission of St. Andrews Episcopal School is to nurture a diverse community in the Episcopal tradition, fostering spiritual growth, moral responsibility, academic excellence, and artistic and athletic pursuits, while preparing for a life of service to our community and the world.

#### LITERATURE SUMMARY

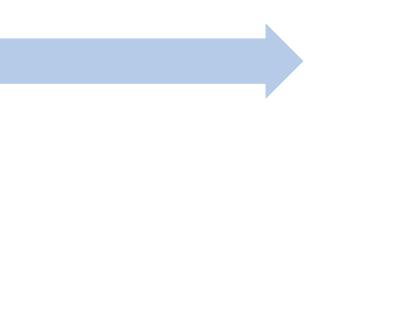
The developmental FOR suggests that development is sequential; therefore, behaviors are influenced by the level or degree in which the individual has grasped and integrated the previous stages (Creek, 2014). St. Andrews uses the developmental FOR in its earning environment by focusing on learning through the development of the child. The school views each child's developmental stages as an individual and offers appropriate guidance and resources to assist in mastering developmental stages.

Pacheco, Gabbard, Ries, Bobbio performed a research study on 100 Brazilian children (ages 8-11 years old) evaluating interlimb Bruininks-Oseretsky Test of Motor Proficiency and the Academic Performance Test. Overall, there was a significant association between academic performance and Body Coordination, specifically Bilateral Coordination.

landwriting is a complex skill that requires the process of coordinating the eyes, arms, hands, pencil grip, letter formation, and oody posture (Handwriting, n.d.). Occupational Therapists observe and assess the mechanisms that are essential for handwriting The OT will suggest home activities and develop a curriculum with the teachers that supports the development of the skills nentioned, and will eventually translate into good handwriting (Handwriting, n.d.).

## NEEDS ASSESSMENT





Identified key needs . Identify OT Red Flags for various grade levels . Create activities to address OT skills while working on academic 3. Create a program with activities for parents to use if unable to receive OT services and for teachers to utilize in their curriculum to strengthen OT related skills

#### PROJECT GOALS / OBJECTIVES

Design activities for teachers that improve children's fine motor skills, visual-motor, etc while also incorporating academic skills by th 5<sup>th</sup> week.

 Create meetings with teachers to determine important OT skills and academic material to include in program

Develop an educational program and session for parents and teachers to incorporate into their curriculum or home schedule to improve specific skills by the 10<sup>th</sup> week.

- Meet with administrators and staff at the school to discuss the most appropriate way to distribute the program.
- Determine the best design or template for user friendliness and simple word usage for easy understanding

The student will measure the effectiveness o the program and activities through program evaluation by the 14<sup>th</sup> week.

 Post-survey will be distributed to parents and teachers to obtain feedback regarding the usability and efficiency of the program

# PROJECT DEVELOPMENT

Red Flags for OT related skills: Fine Motor, Bilateral Coordination, Social Skills Visual Perception, Sensory Processing (Grades Pre-K4 -2<sup>nd</sup> Grade)

**OCCUPATIONAL THERAPY** 

success. The following are 'red flags' that may suggest a child would benefit from an OT

Fine Motor: Fine motor skills involve the refined use of the small muscles controlling the

**RED FLAGS: PRE-K 4** 

Stiff or shaking hand movements

Unable to copy a cross (X)

Unable to cut across a piece of paper

n partnership to complete everyday activities

Uses one hand for an activity that requires use of two hands

• Unable to adapt or cope with change in schedule or routine

Social Skills: Social skills promote positive interaction between peers and adults.

Visual Perception: Visual perception allows the eyes to interpret what is seen into

Upper body/Core

Strengthening

Exercises

Difficulty coordinating hands during scissor use

Unable to share at all with other students

Eves that are unable to focus on task at hand

Difficulty sorting colors, shapes, cards

meaningful information.

List of easy to perform activities for each OT skill with instructions and pictures

Links to the activities and free printable worksheets

Pre-K4 Activity Worksheets/Resources

\*For each resource: scroll down to bottom of page to download pdf and print worksheets\*

1. Activity #1- Letter Identification Dauber Worksheet

2. Activity #2- Bingo Dauber Alphabet Worksheet

https://www.123homeschool4me.com/free-alphabet-mazes\_91/

correct and incorrect ways to hold scissors

https://thehappyhandwriter.co.za/free-practise-cutting-worksheet

https://www.education.com/worksheet/article/tracing-basic-shapes/

https://www.giftofcuriosity.com/product/shapes-practice-worksheet

7. Fun ways to practice cutting skills

3. Activity #3- Play Dough Mats

5. Activity #5- Alphabet Maze

https://www.preschoolplayandlearn.com/letter-recognition-worksheets

https://www.preschoolplayandlearn.com/alphabet-do-a-dot-marker-printables

nttps://www.kindergartenworksheetsandgames.com/free-alphabet-playdough-cards

UPPERCASE: https://www.preschoolplayandlearn.com/letter-crafts-for-preschoolers

Lowercase: <a href="https://www.kindergartenworksheetsandgames.com/lowercase-letter-crafts">https://www.kindergartenworksheetsandgames.com/lowercase-letter-crafts</a>

Scissor Cutting

6. How to hold scissors correctly resource: scroll down to download graphic describing

Drawing/Tracing Shapes

https://thehappyhandwriter.co.za/how-to-hold-scissors-scissor-cutting-for-pre-schoolers

PRE-K4 FINE MOTOR ACTIVITIES USE A DOT MARKER TO STAMP REQUESTED LETTER. GREAT ACTIVITY
FOR VISUAL DISCRIMINATION BETWEEN LETTERS AND UPPERCASE/LOWERCASE RECOGNITION.

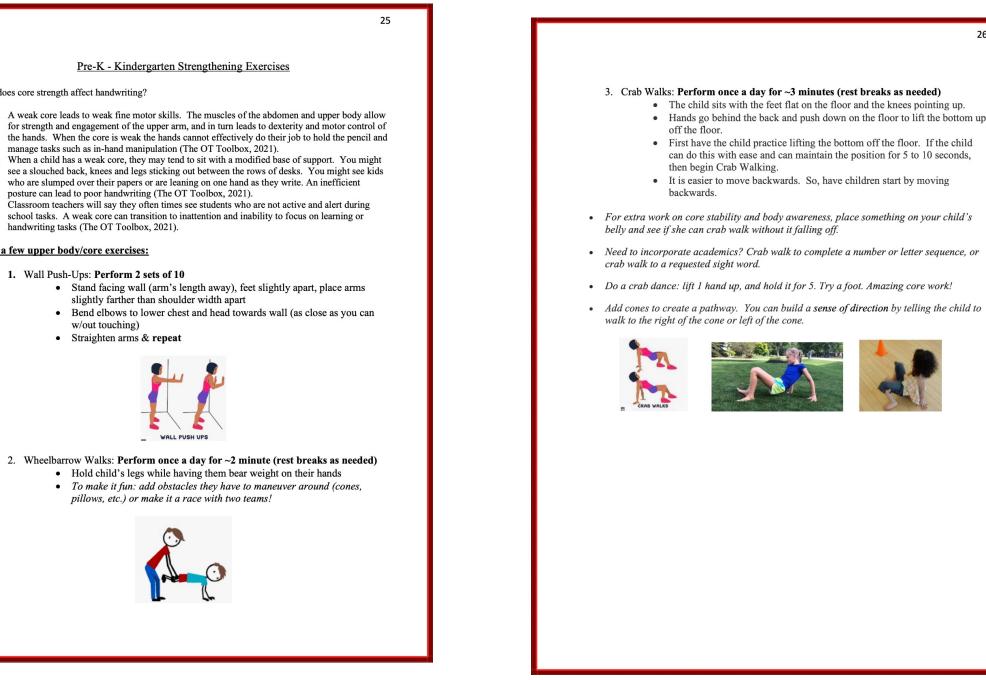
Improve body posture

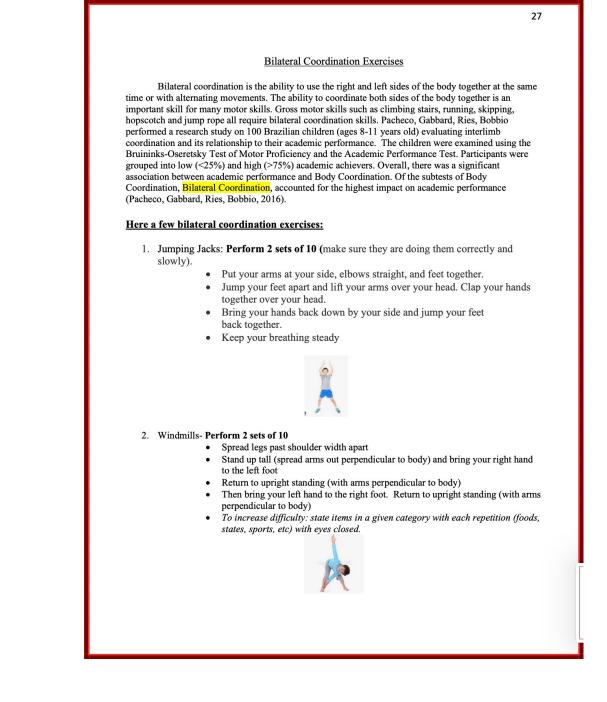
and increase muscle

shoulder, and core

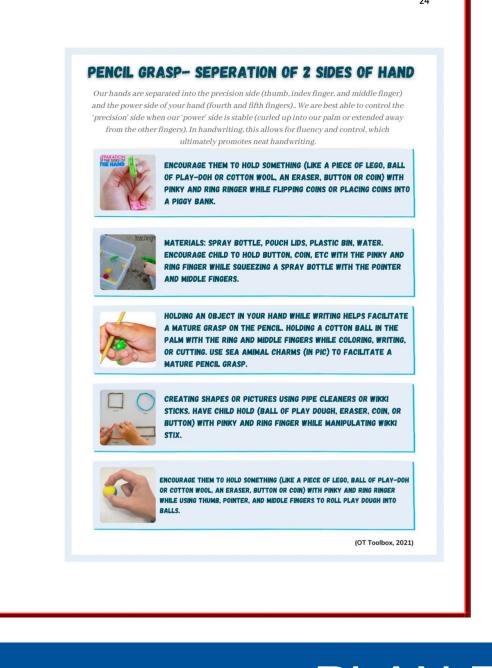
FOR VISUAL DISCRIMINATION BETWEEN LETTERS AND USE DOT MARKER TO FORM SPECIFIC LETTERS OR NUMBERS ON THE DO A DOT WORKSHEETS. BE SURE TO VERBALLY PROMPT LPHABET DAUBER PAGES CAN BE DONE USING CRAYONS, PLAY DOUGH MAT: MANIPULATE PLAY DOUGH TO FORM UPPERCASE
AND LOWERCASE LETTERS, NUMBERS, AND SHAPES. PLAYING WITH PLAYDOH HELPS STRENGTHEN LITTLE HANDS TO PREPARE THEM FOR WRITING. PLAYDOH IS FUN AND ALLOWS CHILDREN TO BE CREATIVE PRINTABLE WORKSHEET, SOMETHING TO COLOR (CRAYONS, CLEAN WITH A PAPER TOWEL AND YOU CAN DO IT AGAIN! INCLUDED IN THE ABC PRINTABLE ARE BOTH UPPER AND LOWER CASE

Improve handwriting

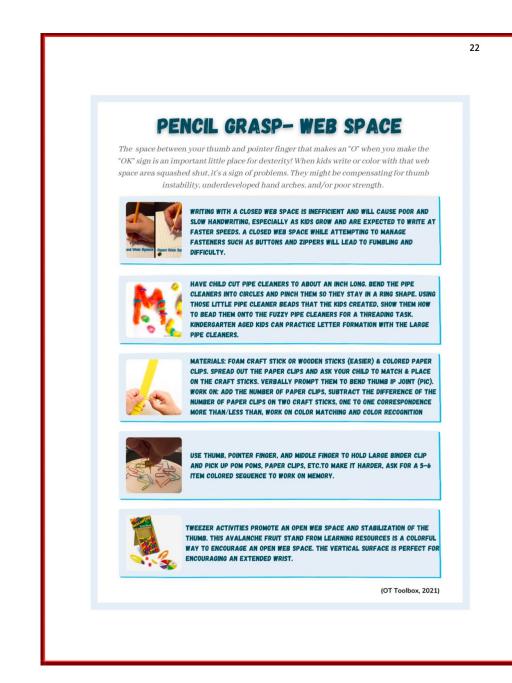




Key components of a pencil grasp with activities to increase FM strength

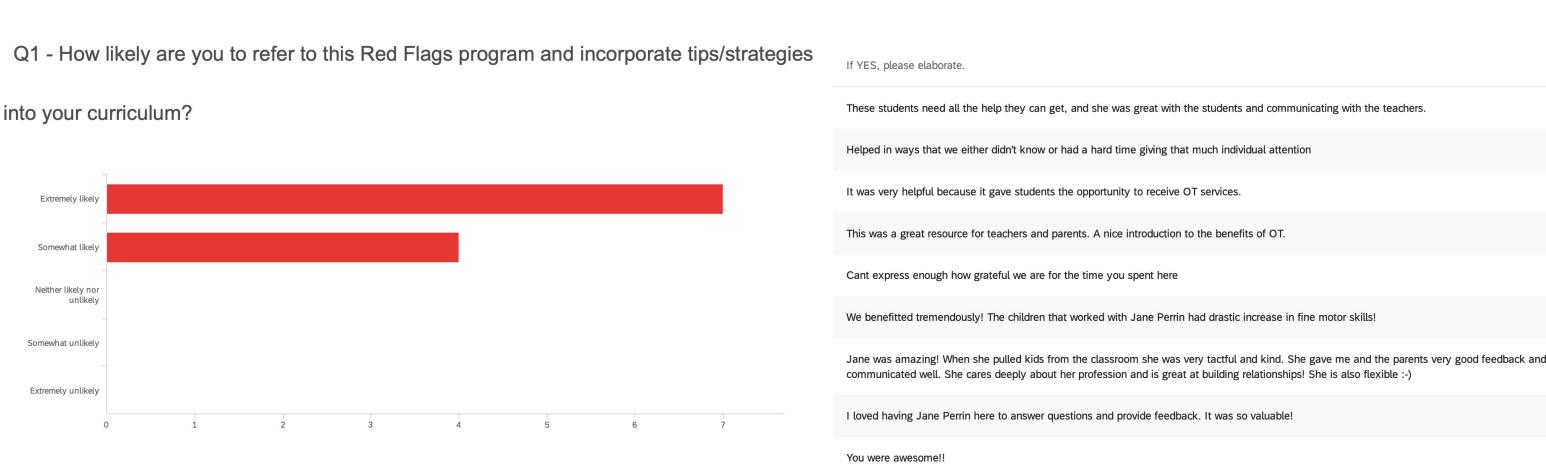






# PLAN FOR PROJECT EVALUATION

Participants: 14 teachers Survey Respondents: 11 8 Question Post Survey



#### PROJECT SUMMARY AND FUTURE RECOMMENDATIONS

The Capstone Project aimed to educate teachers and parents on Red Flags in OT related skills (fine motor, bilateral coordination, social skills, and visual perception, and Visual Motor skills) for ages Pre-K -2<sup>nd</sup> grade. The Red Flags Program was created to provide activities for each skill identified with easy-to-follow instructions to strengthen skills. Also, it provided hyperlinks to free resources and worksheets. The program also provided educational handouts regarding proper development of pencil grasp, scissor progression, benefits of core and shoulder strength to increase handwriting legibility and improve sitting posture. Future research could include determining a method of ensuring all teachers are teaching proper letter formation. Present and educate teachers on how to use Red Flags Screening Tool, continue to work with students in small and individual groups using activities from Red Flags Program, and document feedback and progress using an additional survey.