## FAB (Functionally Alert Behavior) Strategies to Improve Self-Control

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## Abstract

This paper describes the FAB (Functionally Alert Behavior) Strategies approach to improve behavior in children and adolescents with complex behavioral challenges. FAB Strategies include evidence-based environmental adaptations, sensory modulation, positive behavioral support, and physical self-regulation strategies. FAB Strategies can be used by teachers, parents, as well as occupational, physical, speech and mental health therapists to improve the behavior of students with developmental, sensory processing and mental health challenges.

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Teachers and therapists face the challenge of helping students develop appropriate behavioral skills that support learning. This challenge has become more difficult given the increasing demands of the common core curriculum and numbers of students with complex behavioral challenges. It is important to address students with complex behavioral challenges because their behaviors interfere with these students' and their classmates learning. FAB (Functionally Alert Behavior) Strategies can improve self-control in students with complex behavioral challenges.

FAB Strategies are individualized to help students with complex behavioral challenges including behavioral, social, developmental and sensory processing skill challenges. FAB Strategies were specifically developed to address the neuropsychological needs of complex behavioral problems related to Autism Spectrum Disorder (Reynalds & Lane, 2011; Tomcheck & Dunn, 2007), intellectual disabilities (Chapman et al., 2006), psychiatric disorders (Ben-Sasson et al., 2009; Carter et al., 2009; Gouze et al., 2009; Green & Ben-Sasson, 2010; Van Hulle et al., 2012), and PTSD Blaustein & Kinniburgh, 2010; Hanson et al., 2010; Henry et al., 2007). Actively learning self-control through strategies like the "turtle technique in a sensory coping area" helps children with complex behavioral challenges reduce aggression by developing attention, self-control and functional communication skills (Raaijmakers et al., 2008; Riggs et al., 2006; Sweeney-Kerwin, 2007).

In addition to helping students with complex behavioral challenges FAB Strategies facilitates attention, learning, and parental involvement in typical students. Given the increasing use of mainstreaming in schools, FAB Strategies simultaneously addresses special needs students and their typical classmates. Many typical students lack adequate seated attention, self-control, and sensory-motor skills to master their academic learning requirements. FAB Strategies are fun activities that engage student's musical, visual-spatial, and bodily-kinesthetic intelligence to improve learning (Brand, 2006). FAB Strategies further promote the learning environment for typical students by providing opportunities for active learning.

The FAB Strategies form lists activities that promote learning and address students' behavioral, self-control, developmental, and sensory processing challenges. The FAB Strategies form can be used as a checklist of behavioral interventions and a practical way of developing coping strategies. A student's individualized FAB Strategies form can be used across settings then transferred to the next teachers and therapists.

Strategies are developed by using a check mark in the blank at the beginning of the line, then underlining the specific strategies to be used. The checked strategies are for use by teachers, therapists and families. A few FAB Strategies options (listed in bold type) can be marked with an X for use by trained occupational, physical, speech, and mental health therapists. Two blank lines on the bottom of the form enable teachers and therapists to add strategies not listed. Below this is a line for the parents or guardians signature indicating that they understand and agree with the goal, adaptive equipment, and adaptive techniques listed on the form. Beneath the signature line is a list of helpful resources that can be underlined for use.

The FAB Strategies form is organized into four sections addressing: environmental adaptations, sensory modulation, positive behavioral support, and physical self-regulation strategies. The teacher and/or therapist lists objective educational goals at the top of the FAB Strategies form, and selects at least one strategy from each section for goal attainment. Strategies chosen are checked and underlined for use across disciplines. The FAB Strategies form enables teachers and therapists to individualize the strategies to the student's developmental level and individual

Section A Environmental Adaptations is the foundation for improving behavior, social skills, development and sensory processing. Although often neglected environmental adaptations enable teachers and therapists to prevent rather than react to inappropriate behavior (Machalicek et al., 2007). Environmental adaptations improve behavior and reduce arousal levels in all youngsters, but provide significantly greater effectiveness for students with developmental disabilities (Shapiro et al., 2008). Environmental adaptations include adaptive equipment, adaptive techniques, and visual supports that reduce anxiety (Brosnan & Healey, 2011).

The student's goal guides the selection of environmental adaptations (Lieberman et al., 2011).

Adaptive equipment significantly improves behavior in children with developmental disabilities (Ospina et al., 2008). Useful adaptive equipment includes disk-o-sit cushions (Pfeiffer et al., 2008), weighted vests (Buckle et al., 2011), and use of a sensory coping area (Hotz et al., 2006). Adaptive techniques include strategies such as limiting classroom noise levels, crowding, and transitions. Visual supports combine adaptive equipment and techniques.

Visual supports help enable students with developmental challenges to meet social expectations (Jaime & Knowlton, 2007). Visual written and/or picture schedules can help children understand rules, schedules, routines, transitions, and how to earn rewards (Diamond & Lee, 2011). Schedules can be reviewed before environmental triggers (such as lunch time or assemblies where the child has previously been physically aggressive) as part of a comprehensive behavior plan. It is important to explain the rules for using environmental adaptations and to teach students to use them before environmental triggers (e.g., transition times, active movement activities, smells, high noise levels) and when they first notice their body triggers (e.g., increased heart rate, rapid breathing, crying, hand fisting) that precede misbehavior (Dunn et al., 2012).

When developing environmental adaptations, it is important to consider the dynamic relationship between behavioral, social, sensory, cognitive, and environmental challenges (Henry et al., 2007). Environmental structure and behavioral demands are interacting variables, with greater sensory demands suggesting the need for more structure. When children show improved self-control or the demands are decreased, structure can be reduced to promote independence. It is helpful to assess the effect of adaptive equipment and techniques on goal achievement and anticipate possible problems before using adaptive equipment and techniques. Introducing environmental adaptations one at a time helps teachers and therapists judge their effectiveness on goal attainment. Adaptive equipment and techniques can be presented as "an experiment that will be continued only if it is found to help achieve the child's goal and respect others".

Environmental adaptations are most helpful when they are individualized to achieve the child's goals. An understanding of the child's unique sensory processing style can help in developing adaptive equipment and techniques that match the sensory input of problematic behaviors (Dunn, 2007). For example, a child with developmental challenges who was a tactile sensory seeker grabbed items off the shelves whenever his mother took him shopping. The comfort bag strategy (access to a bag with fidget toys and a preferred video game) was selected to help this child improve self-control. The child is now allowed to use the coping bag while shopping with his mother as long as he does not touch grocery items with out permission. If the child grabs items off the shelf his mother simply takes away the comfort bag and leaves the store.

In mainstream classes it is helpful to have a class rule that "students will be treated fairly but not equally", with expectations and equipment guided by each student's needs. If extensive or detailed environmental adaptations are needed the FAB Environmental Adaptations form can be attached as a supplement to the FAB Strategies form. It is important that the parent or guardian understands and gives signed approval for all environmental adaptations on the FAB Strategies form before they are implemented.

Section B Sensory Modulation strategies build on the foundation of environmental adaptations with activities that improve behavior (Tomcheck & Dunn, 2007). The sensory modulation strategies help children understand and manage their energy levels and feelings. Sensory modulation strategies include coaching e.g., guiding students, school staff, and family members in developing environmental adaptations (Dunn et al., 2012), promoting an understanding of feelings (Blaustein & Kinniburgh, 2010), basic yoga and mindfulness (Chambers et al., 2009; Kaiser-Greenland, 2010; Koenig et al., 2012; Flook et al., 2010), body awareness (Singh et al., 2008), and pressure touch strategies (Perry, 2009; Silva et al., 2011).

The FAB event trigger, body trigger, energy level, energy level modulate, and coping strategies help students learn to recognize and understand their feelings (Blaustein & Kinniburgh, 2010). Students need to notice when they are beginning to lose control and use coping strategies to manage their strong feelings. The Pagano FAB Trigger & Coping forms are pictures identifying common environmental triggers, body triggers, and coping strategies that can be used as visual reminders (Mass. Dept. of Mental Health, 2006). The FAB event trigger, body trigger, energy level, energy level modulate, and coping strategies help students with complex behavioral challenges identify and manage their arousal level so they can benefit from playground and counseling activities with out getting overly excited or aggressive when they return to class (Reynolds & Lane, 2011). For example, if a child rates his energy level as "uncomfortably high" immediately following playground activities or counseling sessions he is helped to calm down by doing pushups before returning to class.

Yoga and mindfulness strategies are useful for reducing children's physical and verbal aggression (Flook et al., 2010). Basic yoga and mindfulness strategies improve behavior in students with self-control difficulties (Rubia, 2009), Pervasive Developmental Disorders (Koenig et al., 2012), cognitive and mental health challenges (Chapman et al., 2006). FAB sensory modulation strategies using basic yoga and mindfulness include: focus on feet (Singh et al., 2008), focus on palms, tense and relax muscles, belly breathing, mindful clock, the bird (Flook et al., 2010), and 4462 breathing (Brown & Gerbarg, 2012).

Individualized pressure touch strategies reduce anxiety and promote self-regulation and behavioral development in children with Autism Spectrum Disorders (Silva & Schalock, 2013), developmental disabilities (Izawa et al., 2012), and attention problems (Kimball et al., 2007). Preschoolers with Autism Spectrum Disorders show significantly improved sensory processing and behavior skills following specific deep pressure touch strategies (Piravej et al., 2009; Silva et al., 2011).

Young children with Autism Spectrum Disorders who are hyper-responsive to touch appear to benefit from sensory processing intervention, while both hyper and hypo-responsive preschoolers with Autism Spectrum Disorders show significantly improved behavior and sensory processing skills following firm pressure touch (Silva et al., 2011). FAB Pressure Touch strategies include the: head crown, shoulders squeeze, shoulders press, spine roll, back protocol, and touch on the arms. The FAB Pressure Touch Strategies form can be attached to the FAB Strategies form to provide detailed touch pressure instructions.

Section C Positive Behavioral Support strategies facilitate motor self-control (Riggs et al., 2006) to improve behavior (Kazdin, 2008; Wood et al., 2009). Verbally and physically aggressive behaviors involve dysfunctional motor self-control that is expressed through behavior problems such as yelling, swearing, spitting, punching, and kicking. Based on emerging clinical and neurological research linking motor self-control to reduced aggression (Hanstede et al., 2008) and enhanced social skill development (Rhoades et al., 2009) several sensory modulation strategies address motor self-control.

For students with emotional and developmental challenges such as Autism Spectrum Disorders specific reinforcement and prompt strategies promote social skills. Because many students with Autism Spectrum Disorders and emotional challenges show significantly different behavior on separate occasions, the reinforce attempts strategy encourages good effort (Stahmer et al., 2011). The sign, verbal, and break mand strategies improve behavioral development and reduce aggression by teaching students to request attention, desired objects, and a break from demands (Voos et al., 2012). Practice with reinforcement for the use of polite language can improve behavior (Greene & Ablon, 2006). If a student with tactile sensitivity swears when requesting to have the tags removed from his shirts, for example, he can repeatedly practice requesting "Please cut off my shirt tag" when not irritated, and be immediately assisted after using this phrase.

Conditioned calm recall is a unique FAB strategy that was developed to teach nonverbal developmentally disabled children to relax and behave less aggressively (Lieberman et al., 2011; Sautter & LeBlanc, 2006). Conditioned calm recall repeatedly pairs an unconditional calming stimulus (e.g., specific movement or deep pressure touch activity) with a conditioned stimulus (e.g., a specific scent) during the student's regular occupational, physical, speech, and/or mental health therapy sessions. When the student is exposed to event triggers or shows body triggers, the scent is immediately provided and the child is reinforced if he calms down and avoids aggression.

Current brain research suggests that most students initially process anger and other negative emotions unconsciously in the right cerebral hemisphere, but require hemispheric communication involving the left cerebral hemisphere for conscious awareness, verbal expression and emotional regulation (Riggs et al., 2006; Shobe, 2014). This can be particularly challenging for students with complex behavioral challenges. Research indicates significantly greater difficulties with neurological communication between the left and right cerebral hemispheres in students with a diagnosis of Autism Spectrum (Alexander et al., 2007; Anderson et al., 2010) or Post Traumatic Stress Disorder (McCrory et al., 2010; Pechtel & Pizzagalli, 2011).

The switch hands toss strategies combine sequential two handed movement activities with the expression of feelings. Switch hands toss is a fun activity that is designed to facilitate social development and the verbal expression of feelings. While some children with behavioral, developmental and sensory processing challenges resist seated social skill practice involving the verbal expression of feelings, they are more willing to express their feelings using movement games. The switch hand toss strategies are group or two person games combining movement with the verbal expression of feelings to promote functional communication between both cerebral hemispheres (Koester, 2012; Riggs et al., 2006; Scholz et al., 2009; Shobe, 2014; Sun et al., 2007).

The FAB switch hands toss strategies **c**an be easily graded by selecting the specific strategies at the client or groups' level. FAB switch hands toss strategies are graded to address the verbal expression of: favorites (e.g., color, team, quality in a friend), best coping strategy, guessing the feeling or degree of feeling expressed by the therapist or peers, expressing their current feelings e.g., "<u>I feel angry</u>", and I messages (Miller, Rathus & Linehan, 2007) e.g.,

"when you <u>yell at me</u>, I feel <u>sad</u>, so please <u>speak to me politely</u>". The FAB switch hands toss strategies are fun positive behavioral support strategies that improve self-control through practicing the verbal expression of feelings.

Enhancing social and communication skills significantly improves the behavior of students with developmental and behavioral challenges (McClure et al., 2007; Thayer, 2007). The switch hands toss, coping card, character comic, and praxis comic strategy are unique FAB Strategies to improve functional behavioral and social skills (Gray & Atkins, 2010; Spencer et al., 2008). The coping card strategy integrates the child's preferred interests, behavioral goals incompatible with aggression (Kazdin, 2008), environmental adaptations and techniques, and reinforcement schedule. For example, a student who frequently bites peers when the class is loud constructs a coping card with a drawing of his preferred interest Sponge Bob, coping pictures of his chewy and noise cancelling head phones (colored, cut out, and pasted on an index card from the FAB Trigger and Coping forms). The coping card includes the written caption: "Sponge Bob keeps a safe mouth for ten minutes earning one sticker (five stickers= 1 toy car). He can bite a chewy and use head phones to cope". The coping card is worn or posted to remind the child and all staff of his behavioral goal, preferred interest, coping strategies, and reinforcement schedule.

The character comic strategy associates a super hero with a desired behavior. For example a student trying to stop hitting others would draw Spider Man showing kindness with the caption "Spider Man Kind". The praxis comic strategy promotes direction following with drawings and captions sequentially depicting his activities (Diamond & Lee, 2011). For example, to improve behavior in a small group the students draws a praxis comic consisting of four sequential comic strips. The praxis comic is titled "my small group" and has four sequential drawings and the captions: 1) Move the desks and chairs into a circle 2) Sit to do an art project 3) Play a standing game 4) Move the chairs back and return to class room activities. The praxis comic is reviewed before each group to prepare students for what they will be doing.

Section D Physical Self-regulation strategies improve attention, behavior, and social skills using sensory processing (Gabriels et al., 2008; Gal et al., 2010; Mailloux et al., 2011; Miller et al., 2007), cardiovascular (Buck et al., 2007; Lang et al., 2010; Ratey, 2008), strengthening (Kaufman & Schilling, 2007), and dynamic balance activities (Bart et al., 2009). These physical self-regulation strategies help students with complex behavioral challenges as well as their typical peers (Mohr et al., 2009). Verbally and physically aggressive behaviors involve dysfunctional motor self-control that is expressed through behavior problems (e.g., yelling, swearing, spitting, punching, and kicking). Based on emerging clinical and neurological research linking motor self-control to reduced aggression (Hanstede et al., 2008) and enhanced social skill development (Rhoades et al., 2009) the physical self-regulation strategies were developed to enhance motor self-control.

The Goal-Plan-Review strategy improves motor planning and frustration tolerance (Rodger & Brandenburg, 2009; Sugden, 2007). For example, a student with difficulties in shoe tying and hair styling develops a goal e.g., "tying my sneakers and pony tail so they don't come loose". Her goal is addressed with a plan involving the kinesthetic and verbal directions e.g., "pull tightly". She next attempt to do these tasks with encouragement and reinforcement from her teacher and therapist. The student then does a review based on whether her laces and ponytail stayed securely fastened, and how she might secure them more permanently next time e.g., "pull slowly and forcefully".

Movement activities combining deep pressure input through the joints with slow linear movement are especially helpful in providing sensory input to enhance self-control. For mainstreamed students these strategies can include: setting table, moving mats and tables, delivering messages and boxes through out the school, drawing, and crafts. Home physical self-regulation activities to improve self-control include walks, biking, scooter riding, swimming,

basketball, soccer, dancing, playground activities, and weight lifting. Movement break games for teaching inhibitory motor self-control include freeze dance (where students must dance then freeze when the music stops), giant steps, and Simon says (Berkowitz, 2008; Blair & Diamond, 2008). These movement break games combine fun activities with inhibitory movement self-control. For example, to win at Simon Says students must follow directions and inhibit moving to "do this" unless "Simon says".

FAB Strategies provide practical evidence based activities that can be done across settings with teachers, parents as well as occupational, physical, speech, and mental health therapists. FAB Strategies help all students learn better while providing a practical way to integrate goal-directed services into regular classes for students with complex behavioral challenges (Bazyk et al., 2009). FAB Strategies promote practical interventions that improve students' behavior so they and their classmates can achieve their educational goals (Pfeiffer et al., 2011).

### FAB Strategies® to Improve Self-Control Form

Copyright © 2015 by John Pagano, Ph.D., OTR/L www.fabstrategies.org X-therapist  $\sqrt{-}$  family/teacher A-Attached form

Client:	Therapist:	Contact
Functional Goals:		Dates:

## A. ENVIRONMENTAL ADAPTIONS

- \_\_\_\_ Sensory coping area/Transition prep/Choices/Low noise/Headphones/Fidget-Comfort Box-Bag
- \_\_\_\_ Ear Press/Weighted-Blanket-Vest/Pencil grip-Keyboard/Ipad/Chewey/Sit: Disk-Stable-Carol
- \_\_\_\_ Visual: List-Picture schedule-Choices-Diary/Rainbow goal/Good me: Flower-Team/Calm face
- \_\_\_\_ Decrease, then if needed graded increase, sensory input/Increase: Structure-Response time/Speak slow
- \_\_\_\_ Choice of 1 activity from 1 2 3 4 choices; do \_\_\_\_min., clean up before next

#### **B. SENSORY MODULATION**

- \_\_\_\_ Energy level-Modulate/Feeling-Wheel-Vs. behavior/Triggers: Event-Body/Coping/Worry head
- \_\_\_\_ Beans & Rice-Therapyputty-Sand-Playdoh-Water-Glue-Shaving cream/Self-brushing
- \_\_\_\_\_ Jumping on mini-trampoline-Slow \_\_\_\_ Reps/Back rolls/Child's pose/Core sensory input/Core pat
- \_\_\_\_ Tall kneeling push hands-Therapy ball/Press: Desk-Wall /Isometrics: Up & down-Center
- \_\_\_\_ Stretch: Front-Side-Down-Up-Lateral-Rotation/Pull hands apart/Circles: Neck-Shoulders-Hips
- \_\_\_\_ Breathing: Belly-Out: double in fist thumb-4462/Mindful clock: Sit-Stand/Bird
- \_\_\_\_ Tense & relax muscles/Focus on Feet-Palms/Body scan/Wish kindness/Sensory match
- \_\_\_\_\_ Touch vibration: Arms-Back-Body/Back X/Spine crawl/Tap-Press self: Ear to arm-Head to sides
- \_\_\_\_ FAB Pressure Touch: Head crown-Shoulders squeeze-Press/Scapula Squeeze/Spine roll
- \_\_\_\_ FAB Pressure Touch: Back/Arms-Compression-Traction-Roll/Back tech: Tap-Press
- \_\_\_\_ Steam Roller Deluxe®/Mat sandwich/Roll therapyball on client-Core progression
- \_\_\_\_ Supported 3D-Sit on therapyball move: Fwd & bck-Up & down-Sides-Mindful clock

### C. POSITIVE BEHAVIORAL SUPPORT

- \_\_\_\_ Ask permission to kid with-Touch/Prompt filtering words in head/Social role playing
- \_\_\_\_ Breaks: Music-Movement/Conditioned calm recall/ \_\_\_\_\_
- \_\_\_\_ Puppet/Turtle/Schedule story/Coping card/Comic: Character-Praxis/3 Comic/Partial sentences
- \_\_\_\_ Prompts: Physical-Visual-Verbal/Pre-Correction/Humor/Repair/Redirect/Joint-Attention

- \_\_\_\_\_ Reinforce: Attempts/Interaction/Tangible/Point chart/Specific praise/Individual attention
- \_\_\_\_ Mands: Sign-Verbal-Break/Practice saying/Tolerance for delay/Preferred item distracter
- \_\_\_\_ Switch hands toss: Favorites-Coping-Guess the feeling-I Feel-Feeling intensity-I message

#### **D. PHYSICAL SELF-REGULATION**

- \_\_\_\_ Goal-Plan-Review/Freeze: Dance-Shake/Giant steps/Simon says/Red light
- \_\_\_\_ Set table/Move: Mats-Tables/Deliver: Books-Messages-Box/Rolling to Read-Math/Draw/Crafts
- \_\_\_\_ Walk/Bike/Scooter/Swim/Basketball/Soccer/Dance/Playground-Structure/Cardio-Weight lift
- \_\_\_\_ Flex & extend shoulder & ankle Same side-Opposite-Same half/Forward bend: R-L-Both legs
- \_\_\_\_ Hand-Elbow-Both-One same side knee-eyes down right-One opposite knee-eyes up left
- \_\_\_\_ Diagonal/X/Infinity I/Alternate I/Elbow I/Symmetry/Using: Flashlight-Shaving cream-Draw-Ball
- \_\_\_\_ Ball: Wall-Shape-Letter-Quadruped pass-Shoot to target-Bat-Bounce activities/Beanbag pass
- \_\_\_\_ Pull Theraband-Exercise tubing- forward/down/cross midline/Punch heavy bag
- \_\_\_\_ Prone on therapyball: Hands rock/Wheelbarrow walk/Fly/Push wall \_\_\_\_*Reps\_\_\_\_Sec.*
- \_\_\_\_ Pushups: Knee-Wall-Marine wall-Therapyball-Regular Reps\_\_\_/Pull ups
- \_\_\_\_\_Balance beam-Tilt board: Fwd & Bck-Sideways/Walk: Uneven-Obstacle course/Kick: Fwd-Bck-Side
- \_\_\_\_ Crash Pad/Scooter board: Push-Pull-Down ramp/Visual track: Objects-In-Lateral-Diagonal
- \_\_\_\_\_ Suspended Swing: Forward-Back-Lateral-Spin-Throw to target/Astronaut board
- \_\_\_\_ Activities: \_\_\_\_\_\_
- \_\_\_\_ Activities: \_\_\_\_\_

Parent/guardian Signature Supporting Program: \_\_\_\_\_

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References: Gray & Atkins, 2010; Koester, 2012; Lentini et al., 2005; Silva et al., 2011; Smith et al., 2005

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