

Research on the FAST Program Activities

There are nine parts to the FAST curriculum; each activity is guided by research.

Dendrites – Use Them Or Lose Them

- The brain research shows us how with multiple repetitions, dendrite connections are strengthened, and then at certain ages, the brain is pruned and less used connections are washed away, leaving the used dendrites as preferred and only paths. The pruning ages are 8 –9 years and 12- 13 years old (there are several for younger children aged between 0 – 5 years as well).

So, it is important to repeat desired sequences. This is why we repeat the overall *FAST* routines for children each week. But it is also why we should maximise exact sequences to be repeated. The number of repetitions to insure retention before pruning is 300. (Olympic athletes repeat 5,000 times to get mastery).

- To increase parent control of their children, that is to be empowered in their own family, all instructions should be given to parents to give to their children. Our role is to support the parent to help them succeed with their children.

FAST's Goal – Imbedded Compliance Requests – 300 successes by the parent over eight weeks with praise. For example: Ask parents to ask the child to go with them to get flag materials, to get name tags, to sit down, to take a turn, to put something on the flag.

We want to increase the verbal requests for positive behaviours by the parent and the number of positive behaviours and recognition to the child when he/she responds appropriately to the parent. For example: Ask the parent to move their whole family to get the feeling cards, over and over during the 15 minutes, ask the parent to ask the child to serve him/her dinner.

- A number of neurotransmitters in the brain are related to aggression - dopamine, serotonin and neuroepinephrine. These are affected by social interaction. The more praise, touch and rewards, the more the brain chemistry will change in a positive way. With enough repetitions-300, the connections will move from a state to a trait, and the pruning will remove other dendrites but not these.

We want to increase praise, touch and rewards by the parent to their child to 300 times in eight weeks. We will coach to encourage praise, touch and appreciation through all family activities, in dyad activities; also in kid's time.

- Hawkins and Catalano, Embry and Flannery's research specify the impact on child and youth of delegated responsibility as promoting positive self-regard is repeated opportunity to self-mastery and self-directed behaviours with positive regard (from the parent in FAST). We want 300 times over eight weeks, for example – getting the parent the meal, getting the Scribbles materials, being creative in Scribbles, being a good actor in feelings, being creative with junkie toys, making an announcement in the circle. These should be noted and increased in Kids' Time too.
- Recent brain research highlights the negative impact on the brain chemistry from threats, criticism, violence to self and fear. All of these have dramatic effects on serotonin, dopamine and epinephrine neurotransmitters and can with repetition become traits after pruning. FAST is a safe public place which reduces all of these. We must specifically work to block criticism.
- Recent brain research has identified how differently the brain processes information when a child has been traumatised. When they are anxious, they do not use their cortex as much (i.e. thinking things through planfully) but rather react impulsively and reactively. By being in a safe, public place with their

family, their anxiety is reduced and children learn better. By having routines which are familiar and predictable, the anxiety is reduced and learning can take place. By being with family with whom you are connected, in the school building, can help make the environment safer and better for learning.

Family Flags & the Hello

- This activity uses family therapy research which says, that where a family does activities just with its own family members, it becomes a stronger family. The Family Flag and the Hello's make the family stronger.
- When parents are in charge of their family, the family is stronger. In FAST, parents are respected and treated as the boss of their family. The team helps parents to be in charge. Parents are in charge of Family Flags and the Hello's, and give their children instructions for the activities.
- Research on family-based delinquency prevention found that the ways families communicate could affect further delinquent behaviour of youth. FAST uses the results of this research in activities where:
 - every family practises taking turns
 - all activities are fair
 - families ask helpful questions
 - families make helpful comments, no criticism.
- FAST helps families have good times together that do not follow old patterns. Instead families build new ways of doing things together, and the family unit becomes stronger.

Family Meals

- Eating with your own family makes you a stronger family. Eating together is a good experience and strengthens your family identity.
- Family therapy supports parents being in charge of their family - family meals allow the parent to use his/her power to choose one of their children to serve their meal. This activity practices being in charge of their family.
- Wolin's research identified that meals without alcohol, in a family who may have drinking problems, helps children to not become alcoholics. A meal without alcohol builds a family's resistance to alcohol/drug problems.
- Family therapy suggests that the sharing of private information between parents and the FAST team puts the adults into a separate generation group from the children. This research is also used in the Lucky Door Prize - adults know their family will win once but not when they will win. Children do not need to know everything adults know.
- In FAST, parents can give back rather than just receive. Dunst's research says that when people reciprocate (give back) they feel more self-esteem, and feel less helpless and dependent. This research has been used for winning the lucky door prize - then the winning family cooks and hosts the meal next week.

Music

- High stress and feeling on your own can increase the chances of child abuse and neglect. Egeland found that activities, which bring people together in a group, are good for stressed families. Singing builds good feelings and connections between the FAST families.
- When regular weekly activities have no alcohol and drugs, families are stronger and have less chance of drug problems.
- Singing together gets people in a good mood which is a change from the stresses of daily life.
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Scribbles

- Parsons & Alexander (family-based juvenile delinquent prevention research) found that taking turns within each family, and asking each other positive questions, could reduce their youth committing more offences by 50%(half). This family therapy also reduced by 50% (over a three year period) the rate of brothers/sisters getting into trouble with the police. Scribbles helps families communicate. It teaches families who conflict ways to solve problems. Each person is tells their story and others listen.
- Family therapy supports families doing things together. It also supports parents being the boss of their family. In Scribbles, parents are in charge. Parents organise the game where everyone draws, shares and takes turns asking good questions about each family member's drawing. The FAST team gives instructions to the parents, showing children who is in charge of their family. It also shows parents respect for organising their family's participation in FAST.
- Schedler & Block did a 15 year study of children aged 5-18 years on the ways parents brought up their young children. They matched the ways to problems of alcoholism when their children became adolescents. They found that mothers who were critical, controlling, hostile, not warm and did not ask their children questions when children were 5 years old, had children who became alcoholics. Scribbles helps to change these parenting styles. Parents always ask positive questions, each child shows their picture (no right/wrong picture), and no-one is allowed to criticise or make negative comments.
- Egeland & Stroufe's 15 year study on maternal stress, child development, child abuse and neglect studied 200 children from 0-15 years. They found boys did better when their home was organised. Where parents gave support, and their emotional relationship with sons was positive with no hard feelings, the sons did better in schools. There is surprise, fun, laughter when each child shows their hidden picture. Children get to know the routine of the first hour of FAST.
- Brain research shows how important early speech and talking opportunities are for children. These help their healthy brain development. Research on success in schools shows that children who can talk about themselves, tell their ideas to a group, and answer questions do better than those who talk less. Scribbles gives each child time to listen and talk within the safe environment of their family, directed by their parent - everyone has fun.

Feelings Charades

- Recent brain research tells that it is important for children to be self-controlled, rather than being impulsive and violent. Goldman talks about emotional intelligence. Feeling Charades is a time to identify feelings, act out a range of feelings, and have others guess feelings in the safe and caring environment of your family. This helps the mental health of children. This fun game encourages closeness and connections in the family.
- Beavers & Lewis observed healthy families, and found twelve family functions which encouraged health and resilience. Healthy families can express a broad range of acceptable emotions, can openly identify feelings, and someone in the family cares about what another member feels.
- In families with alcohol or drug addicts, there are often two rules - *the no-talk* and *no-feel rule*. Families who deny they have drug problems will avoid talking about their feelings. Often in families where there is anger and violence, children either stop looking at their parent's faces, or always try to watch their parents' faces for signs of their behaviours. In FAST, we break these rules with fun family games and give everyone time to practise talking and expressing feelings. In FAST it is safe to take risks. This repeated weekly fun game opens up new ways of getting on together, which helps kids in different life situations.
- Family therapist, Virginia Satir said families are healthy *if* and *when* every family member can start sentences with *I think* or *I feel*. Feelings Charades gives everyone the opportunity to listen, hear and learn more about everyone's feelings.

Buddy Time & Parent Self-Help Group

- Reubin Hill found two factors associated with family survival during the great depression in the 1920's in America. Without social support and hope, families often had serious problems (sickness, violence, child abuse, suicide, depression etc). Families who had social supports within their family, support from other families and their community, and were hopeful that things in the future would be better, survived the many stresses on their family life. The FAST team encourages friendships between FAST families, and builds support for kids and parents.
- Wahler's research found that when parents did not have social supports and were isolated, parent training did not work. Parent social support is critical to build on parent training during FASTWORKS.
- Egeland's study on parents who abused or neglected their children. It found that if parents had social supports, this overcame the risk factors of parent's personality, lack of child development information, and their own poor parenting experiences. Stress and social isolation added *more* to child abuse and neglect. It is more important to build social networks than to start with parent education classes.
- Belle's research on low-income, depressed mothers. When mothers had a supportive, adult relationship, negative patterns of child care and poor relationships with their children were prevented. 15 minutes a day talking to another adult could reduce the risk of becoming a parent who may abuse or neglect their children. In FAST, this research is used in Buddy Time to build close relationships and reduce stress.

Kids' Time

- Family therapy supports parents and kids being separated and doing different activities – kids can be kids and parents can be adults. Kids play at FAST and parents talk with other parents.
- Research on childhood resiliency suggests that having relationships and supports helps kids. Playing with other kids at FAST helps kids make friends with kids from their school.
- It is good for kids to let off steam after sitting with their family for an hour at FAST. Planned activities for all ages of children are good for their development.

Special Play

- Kogan developed Special Play for mothers who had children with severe problems. She had the parent in another room playing with their child. Through a one-way mirror, she coached parents with praise and feedback on how they were interacting/playing. The best play has *no directions and no judging*. She found if parents did 15 minutes of uninterrupted special play each day, children's behaviour improved. In FAST, all parents do Special Play in a big room with coaching from the team. FAST is 8 weeks long to do lots of Special play.
- Family therapists use *enactments* where families are asked to change their ways of relating and practise some new behaviours or actions. Parents try out news ways of relating to their children during special play – parents are asked NOT to direct, criticise or teach, instead praise their child and give to the child their full attention and love without interruptions.
- Barkeley suggests that before trying to change children's behaviour using behaviour modification, parents should do special non-directive play with the child for 20 minutes a day. This creates positive feelings and helps to improve children's behaviour as they want their parent's approval.
- Schedlar & Block's drug abuse research found that how mothers play with their 5 year old children could affect the development of future drug problems in adolescence. Parents who criticized, directed, focused on performance, were tense, and did not respond to children's suggestions, had a. greater chance of their children abusing drugs in teenage years. Special Play is the opposite of this negative parenting style.
- Miller's research showed the serious impact of a mother who does not respond to her child's needs. Special Play provides a weekly, structured 15 minutes with their child and support from the team.

Lucky Door Prize

- Hill’s research on families who survived the great depression showed the importance of social supports and feeling hopeful. That means, being able to turn something difficult happening now, into a chance for something good to happen in the future. In the lucky door prize, everyone gets a chance to win a big basket of prizes. People then feel that they deserve good things to happen to them. The door prize is linked to hosting the meal – a message to parents that they are responsible and trusted to take the money and bring back a meal. A common, shared experience that good things can happen to families is part of coming to FAST.
- Family therapists work with whole families, and in FAST the whole family wins, not one person. The message is families stick together and win as a family team!
- Research to help families attend parenting groups has been used in FAST – eg. incentives such as lucky door prize, vouchers at the store, money for attending etc. At FAST, families need to come regularly to have a chance of winning a prize, but families do not know when they will win. When families do win - they give something back and cook the meal the next week. Parents feel respected and good about themselves, able to put back something, rather than just receive.
- Recent brain research shows that if children can delay their need to have things now, this will help the child be more patient in doing things. If children believe life is fair and they will get a turn, this helps them. In the lucky door prize, even though the team knows the prize is fixed, parents will be able to help their children wait their turn to win. This experience of waiting for their turn to win at FAST will help them in other life situations

Program Components & Research Correlates¹

Activity	Component Description	Research	Building Community
Flag	Each family unit creates a family flag to set on their family table for 8 weeks. Parents are in charge of process in which each family member adds to the flag.	Alexander & Parsons, 1982; Minuchin, 1979.	Each family makes a flag within a community context of perhaps 60 people; this becomes an identity for the family within the community.
Music	Families are invited to bring songs to teach others; school songs can be shared.	Parsons et al., 1988.	Everyone sings the song; sharing music builds community.
Meal	The host family receives money to buy food, plans menu, prepares a meal for 12 families & team. Family is thanked; they won the prize the week before. Staff help children to pay the parents respect by serving them dinner.	Dunst et al., 1988; Minuchin, 1979.	Each family hosts a meal. This builds a feeling of mutuality & shared responsibility amongst families. Everyone eats together.
Scribbles	This drawing & talking game is played with one’s own family. Parents are in charge of taking turns & asking positive questions.	Alexander & Parsons, 1982; Pianta et al., 1988; Minuchin, 1979; Schedler & Block, 1990.	Each family plays at a table within the context of a larger community. Play and fun are emphasized. Support from the team is offered as needed.
Feelings Charades	Play acting feelings to one’s own family. Parent is in charge of taking turns, with guessing and talking	Alexander & Parsons, 1982; Lewis et al., 1976; Pianta et al., 1988; Schedler & Block,	Sharing feelings in one’s own family and sharing with other families builds community.

¹ Lynn McDonald, Stephe Billingham, Tammy Conrad, Arthur Morgan, Nancy O, & Estella Payton, Families and Schools Together (FAST): Integrating Community Development with Clinical Strategies in *Families in Society: the Journal of Contemporary Human Services*, March/April 1997.

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	about one's feelings in a game.	1990; Werner & Smith, 1992.	Support from the team is offered as needed.
Kid's Play	Developmentally appropriate organised activities for the children with positive peer group experiences. No television.	Bronfenbrenner, 1979; Minuchin, 1979; Rutter, 1983.	Time hanging out together, having fun, and developing peer networks, emphasizes friendship in a community.
Parents' Talk in Buddy Time & Self-Help Group.	One-to-one adult time for private communication, followed by a self-help parent group. Parents share their own successes and help one another help their children succeed in school. Informal social-support networks emerge.	Alexander & Parsons, 1982; Belle, 1980; Dunst et al., 1988; Gilligan, 1982; Gottlieb, 1985; Hill, 1958; Lewis et al., 1976; McCubbin & Paterson, 1983; Minuchin, 1979; Pianta et al., 1988; Solomon, 1985; Wahler, 1983; Werner & Smith, 1982.	Parents make friends and find their peers to be supportive and wise. Parents build a local association of interdependent families. professionals serve as backup support.
Parent-Child Time: Special Play.	Child-initiated play whereby parent is coached to follow child's lead and not to teach, direct, or judge child. Play materials are provided.	Barkeley, 1987; Garbarino, 1987; Guerne, 1977; Kogan, 1980; Minuchin, 1979; Schedlar & Block, 1990; Webster-Stratton, 1991.	Parent-child dyads play together within a context of a community of other dyads.
Door Prize. (fixed)	Each family wins once. The winning family is showcased and members receive various prizes. The winner cooks the next week's meal.	Dunst et al, 1988; Hill, 1958; McCubbin & Paterson, 1983; Minuchin, 1979.	Parents know that winning is universal and fair. Cooking the following week's meal models reciprocity.
Closing Circle.	All participants gather into a large circle for special announcements, singing for birthdays, etc.	Bronfenbrenner, 1979; Epstein, 1991; Hill, 1958; Minuchin, 1979.	Sharing information, celebrating special events, and maintaining traditions. Builds community.
Daily Homework for Parents' Special Play.	Parents are expected to do special play every day at home as <i>homework</i> . A behaviour chart and stickers are given to the parent.	Barkeley, 1987; Guerne, 1977; Kogan, 1980; Paterson, 1975; Schedlar & Block, 1990; Webster-Stratton, 1991.	Maintaining a community of caring for the next generation and supporting each other.
Graduation. (8th Session)	Ceremony is held at the school. Entire family graduates. Guests are invited and school principal presents a framed certificate of completion. Graduation hats and <i>Pomp & Circumstance</i> add to this celebration, foreshadowing high school graduation for children.	Bronfenbrenner, 1979; Epstein, 1991.	A community celebration of family achievements with informal and formal supports. The graduation party brings the larger community together around a shared experience.
FASTWORKS (Two Year Follow-up)	Monthly meeting for two years in which the parents determine the agenda, receive a small budget, and receive support from the school. Parents may choose more training or outings.	Alinsky, 1971; Freire, 1995; Hill, 1958; Horton, 1990; McKnight, 1995; Solomon, 1976; Wahler, 1983.	As association of parents begins to express its unique agendas with the school and community. A positive united voice & informal social supports for families.