

BUILDING SOCIAL SKILLS FOR AUTISM, SENSORY PROCESSING DISORDERS AND LEARNING DISABILITIES

*Over 105 Strategies,
Activities and Sensory Tools
for Children and Adolescents*

TARA DELANEY MS, OTR/L & MARY HAMRICK, MA, CCC-SLP



PESI
Publishing
& Media
www.pesipublishing.com

Table of Contents

Acknowledgments	ix
Introduction	xi
Chapter 1: Social Sense	1
• What Is Social Sense?	1
• The Importance of Social Sense	1
• Research Roots	2
• Socially Smart	2
Chapter 2: Sensory Integration: The Social Connection	5
• The Brain Library: What It Is	6
• The Brain Library: How It Works	6
Chapter 3: How to Use This Program	9
• Who Can Use This Program?	10
• How Long Does This Program Take?	10
• Format of the Lessons	11
• Food and Fun!	12
Lesson 1: Social Sense Scientist	19
<i>Objectives:</i>	
1. Students increase attention and responsiveness to others.	
2. Students become familiar with the concept of being a Social Sense scientist.	
3. Students will identify scientists that they are familiar with and what contributions they made.	
4. Students understand the components of a scientific experiment.	
Lesson 2: Social Sense Science Tools	27
<i>Objectives:</i>	
1. Students become more familiar with the concept of being a Social Sense scientist.	
2. Students begin to see how their senses are actually scientific tools that aid them in navigating their social environment.	
3. Understand how the brain controls our actions.	
4. Learn a student-friendly definition of the sensory systems.	
5. Gain a basic understanding of how sensory processing affects us socially.	
Lesson 3: My Food Sense	35
<i>Objectives:</i>	
1. Students will understand that their gustatory sense works in conjunction with their olfactory sense contributing to what they like and dislike in foods.	
2. Understand how food influences our memory of situations.	

3. Learn which foods are good for our brain and body and what foods just taste good.
4. Learn about the Venn diagram in a fun way (two students).
5. Find commonalities between participants.

Lesson 4: Smell: What Do I Smell? What Does It Remind Me Of? 41

Objectives:

1. Students explore their olfactory sense.
2. Students understand how their olfactory sense influences them socially.
3. Learn about Theory of Mind, using a concrete example of how, when presented with the same stimulus, people react and respond differently.
4. Understand that people have different episodic memories based on stored sensory information that affects their perception of sensory information today in various situations.

Lesson 5: Vestibular System: Balance and Motion System 47

Objectives:

1. Students increase self-awareness about their own vestibular sense.
2. Experiment with comfortable distances and appropriate voice volume depending on distance.
3. Learn how to use vestibular input to increase attention or decrease anxiety in social situations.
4. Participate in the hula hoop experiment, using concrete examples of the speaking and thinking bubbles tool.

Lesson 6: Proprioception: Body Awareness 55

Objectives:

1. Students explore their proprioceptive system.
2. Understand how their proprioceptive system influences them socially.
3. Learn what body input makes them feel calm.
4. Explore nonverbal communication and its impact on receiving and giving social cues.

Lesson 7: Touch: How Do I Feel? How Do You Feel? 61

Objectives:

1. Students explore their tactile system.
2. Understand how their tactile system influences them socially.
3. Students will begin to understand that their brains can control their bodies response to incoming stimuli and information.
4. Students begin to learn how tactile strategies can help regulate them.
5. Recognize how our touch system is tied to our understanding of language.
6. Increase attention and responsiveness to others.

Lesson 8: Auditory: What Do I Hear? What Do You Hear? 67

Objectives:

1. Students increase self-awareness about their own auditory sense.
2. Isolate and identify sounds in their environment.
3. Understand the importance of listening as a skill and how it plays into all social situations.
4. Learn auditory discrimination strategies to calm themselves if overwhelmed.

Lesson 9: Visual: What Do I See? What Do You See? 75

Objectives:

1. Students will explore their visual sense.
2. Establish a habit of scanning their environment left to right.
3. Attach social meaning to the visual information.

4. Practice using thinking-speaking bubbles to control impulsive reactions.
5. Learn how to use visualization to facilitate future social success.
6. Discover strategies to increase visual memory.
7. Understand how auditory information either helps or hinders their ability to take in visual information.

Lesson 10: Brain Over Body 83

Objectives:

1. Students review information they have learned about their own sensory systems in previous lessons.
2. Understand that their behavior is closely linked to how they interpret sensory information.
3. Learn specific sensory and brain tools for calming themselves.
4. Review how to use past memories and future visualizations to get through stressful social situations.
5. Understand “Response-Ability”—our ability to choose how we respond to incoming stimuli.

Lesson 11: What I Say Without Words 91

Objectives:

1. Students understand the importance of nonverbal communication and recognize the impact of tone of voice on our verbal messages.
2. Begin to understand what they can communicate without words.
3. Recognize the importance of attending to the nonverbal cues that others are giving them in order to be socially more in tune with others.
4. Explore positive and negative nonverbal information.
5. See how successful social interactions often are reflected in two persons mirroring each other’s attitudes and feelings.

Lesson 12: The Science of Conversing 97

Objectives:

1. Students make the abstract nuances of social interaction concrete.
2. Practice inclusive conversations.
3. Learn how to be a Social Scientist observer and understand why interactions/conversations are successful and why they are not.
4. Use a ball-throwing activity to demonstrate that timing, sequence, and rhythm are crucial for successful conversations.

Lesson 13: Social Sense Editing™ 103

Objectives:

1. Students review a concrete example of editing written work and learn how it differs from editing real time social scenarios.
2. Understand the power of visualization as a social editing tool.
3. Practice calming strategies to help them through difficult social situations.
4. Understand how positively editing a response will change the outcome of a situation.
5. Act as directors and edit their own social scenarios.
6. Have opportunities to visualize themselves in positive social situations, thereby increasing likelihood of future social success.
7. Review the visualization activity from Lesson 9.

Lesson 14: Connecting With Humor 109

Objectives:

1. Students experiment with laughter and what makes them laugh.
2. See how nonverbal language adds humor to words.

3. Understand how a “humorous perspective” can change their feelings and attitudes.
4. Experiment with and share in a discussion of “When does funny become not funny?”

Lesson 15: The Science of Friendship 119

Objectives:

1. Students recap what they learned as Social Sense scientists and describe what sensory tool helps them the most in social situations.
2. Learn to continuously ask questions about social situations and understand that friendships take time.
3. Use positive imagery (visualization) when inviting and planning an activity with a friend.
4. Understand that taking time with friends is a wise investment.

Social Sense Visuals for Younger Children 123

Supplies and Games 129

Glossary of Terms 131

References 135

About the Authors 139

Acknowledgments

First and foremost I want to thank my husband, Bill Delaney, a socially driven guy who makes me laugh. Thank you for the countless hours you have put into this project. My children, Maggie and Liam, for always showing me that being social starts at home, with a good story and a laugh. To my parents and siblings who encourage me daily.

Mary, thank you for going on this journey with me. You have an amazing Social Sense and I appreciate your drive to help kids develop their own Social Sense.

To Meg Mickelson, you have been such a great support to me in my career. Thanks for always being open to my ideas.

-Tara

I want to thank my Mom, the matriarch of an amazing family, who taught me through her example that it is about the relationships you have in life and not the things you have in life that make you truly happy. To my siblings, who made it impossible for me not to be so social. I am grateful every day for my son, Jon, who is my dream and my greatest gift.

To teachers everywhere who tirelessly give their time and expertise to their students. A special nod to Sandy Daniels, who I had the pleasure of co-teaching with – you demonstrated daily that if you come in prepared, you stay on track and you present information that connects students through real life experiences, you will empower children to learn and grow.

To Tara and Bill Delaney, you are a positive force that brings energy and light to everything you touch. You have an unquenchable thirst for knowledge and your desire to help all kids keeps me inspired.

-Mary

We are grateful to Kim Pennington (Baby Steps Manager) and the team of therapists at Baby Steps Therapy and School Steps Inc. who have led Social Sense groups and provided feedback over and over again. We will always be thankful for your insight.

A big cheer to our editor, Claire, for her patience and all the laughs that you provided to us as you worked tirelessly to bring this manual to life.

Finally, Mary and Tara will always be grateful to the Rocklin Unified teachers that first listened to this concept, believed in it and cheered on us on in England. A special toast to Geraldine Nelsen!

-Tara and Mary

Introduction

Tara Delaney (occupational therapist) and Mary Hamrick (speech language pathologist) met more than a decade ago while working at an elementary school in Northern California. The school had Special Day Class (SDC) students, regular education, and self-contained Gifted and Talented Education (GATE) classes. They shared students on caseload who had diagnoses of high-functioning autism (HFA), Asperger's, ADHD, OCD, and anxiety. Mary (SLP) continually noticed that although the students could answer the questions about social scenarios and had the appropriate pragmatic language, they struggled during real-time social situations. They were able to identify emotions when looking at pictures but were not picking up on real emotions of their peers while engaged with them, which made them appear disengaged or even "cold" when interacting with peers. Tara and Mary started discussing these students and realized that the students had underlying sensory processing difficulties that greatly affected them during real-time social situations, this led to viewing social skills in a different way.

The therapists began to see social ability as more of a *sense* rather than separate cognitive abilities. It was an "aha" moment that coincided with their reading of Daniel Goleman's book, *Social Intelligence*. They would meet after school or on the weekends to discuss his book, often calling each other saying, "listen to this line. . . ." They became further convinced that most social skills programs were not taking into account a huge factor of how people perform socially, their nervous system. So something they had not previously been able to articulate became glaringly obvious: Being social was not the result of a rote set of learned skills, far from it. The ability to be effective in social situations is much more complicated than knowing how to introduce oneself. It is the nervous system's ability to register information in the environment, attach meaning to that information, and then respond in a socially appropriate way.

The more they looked at brain research, the more they were convinced that being social was not just cognitive aptitudes but that the underlying noncognitive aptitudes contributed greatly to the ability to be social. This concept made a lot of sense when assessing many of the students who were in GATE programs and successful academically but were struggling socially. Encouraged by the GATE teachers at Rocklin Elementary in Rocklin, California, they put their thoughts together and entered a proposal to speak at the World Gifted and Talented conference in England in 2007. When the proposal was accepted, they developed a presentation to reflect research that linked noncognitive processes, such as sensory processing, to social intelligence.

From the Authors: It was exciting as well as nerve racking. Once we presented this concept to a room full of educators from around the world, we saw that it struck a chord. Teachers came up to us expressing their concern for so many of their students who were in GATE programs but who were struggling socially. Educators worried about these kids and were excited about the potential for a program that would address these social issues for children. It was another pivotal time in the progression toward developing this program because we realized that educators needed and wanted a lesson plan format program that addressed both noncognitive and cognitive aptitudes of being social.

Finally in 2007 we put into concrete words what we had been feeling and saying in a roundabout way for over a year—that the notion of thinking of being social was not skills a student should learn, but rather a “sense” that we could help students develop. This “aha” moment would eventually be the foundation in which we developed the Social Sense program.

Labeling it as Social Sense changed the way we viewed children in social situations. It also helped create a new framework in which to develop a dynamic social sense program, a program that incorporated the components of social sense instead of social skills. At first we concentrated on the body of research around autism and Asperger’s syndrome as we gathered research from prominent researchers such as Simon Baron Cohen, Eric Courchesne, Sally Rodgers, and V. S. Ramachandran. However, it was when we branched out to researchers such as Richard Davidson, Lucy Jane Miller, Leonard Sax, Jacopo Annese, and of course the work of Dr. Jean Ayres (the founder of sensory integration theory) that we began to formulate concrete ideas of a social skills program that focuses more on the nervous system and noncognitive aptitudes than on rote skills. Because the nervous system begins developing in utero, we were drawn to the research that examined early development and how it affects our social world.

In 2009, after working on this program for years, we began running social-skills groups out of our nonprofit clinic Baby Steps Therapy in Rocklin, California. We organized all the activities into lesson plans and started taking notes on what was working and ways to improve the program. One thing was clear, children change in the midst of activity. They talk more, they laugh more, and ultimately we were convinced that they were learning more! We originally started with 10 one-hour sessions, but something was missing—the connection to the parents. We revamped the program and added two more sessions solely dedicated to parents. The first session consists of a group meeting with parents in which we laid out the program, providing them with a general overview and pointing out the importance of the interactive homework. The last session includes an overview of their child’s strengths and the areas we saw as important to continue to foster social development.

After almost two years of running the program ourselves, we asked other therapists to run the program, working off the lesson plans we had written. Their input was instrumental in shaping the lesson plans into what they are today in this manual. It was the feedback of the occupational therapists, speech therapists and behaviorists in our clinic that drove us to clarify parts of the lesson plans, enrich many of the experiments as well as develop the notes sheet that is part of the program. We are beyond grateful to the therapists who work at Baby Steps Therapy clinic for their willingness to try something new and provide us with feedback. It goes without saying that it is kids and their parents who have shaped this program. Parents are huge drivers for change and ultimately spur us in the educational and medical world to seek more information and be better at what we do.

This human ability to connect with others begins in utero, and we tend to take this ability for granted until we have a son/daughter or student who struggles in this area. We have learned so much from parents of children who struggle socially. Many of the parents have reported to us that although their child is successful academically it is extremely difficult and heart wrenching to see them without friends and unable to adapt when faced with changing environments. So much so, that the parents say that they would rather have their child struggle with reading or math because they feel more empowered to help them with academics than to help them socially.

As a parent, when you have a child who struggles with math or reading, you can seek out specific interventions and work on targeted skills. When your child struggles socially, it is something that affects that child every day during every aspect of his or her life. Our hope is that this program gives a concrete way to work on something that eludes textbook learning. We hope that once children understand themselves better and realize that others process information differently, they will be more equipped to connect with others, which will result in lifelong friendships.

Chapter 1 – Social Sense

WHAT IS SOCIAL SENSE?

Our social ability is the totality of an effective sensory processing system, pragmatic language abilities, and the neurological drive to connect with other human beings. These aspects combine together to make up our social sense. This sense allows us to be aware of others' feelings and thoughts, "get" complicated social scenarios, and then proceed with smooth, effective interactions. Our social sense is our first "extra-person" sense. Our brains and bodies are internally influenced by the feelings and actions of the people we encounter. Other biological systems are regulated by activity within our bodies. With our social sense, we engage with the world beyond our bodies. We naturally sense or read others' feelings and emotions and can predict their actions.

Our ability to connect or get in synch with others begins in utero and is much more advanced and sophisticated at earlier ages than we ever suspected. The connections made when we are infants are sensory-based. These connections provide the necessary step of bonding and set the stage for future lifelong relations. Social sense connectedness begins at a primitive level, in essence at the nervous system level. As such, healthy sensory processing is crucial to the development of our social ability. In the Social Sense Program, participants learn about their sensory systems by experimenting with those systems. They learn to understand how their sensory reactions impact their perception of themselves and others in their world. We discuss how their perceptions and actions affect them in social situations and how their brains can be trained to control their sensory reactions.

The Social Sense Program starts with the sensory systems because we know that many children who struggle socially have difficulty processing sensory information. These difficulties, although not easy to identify or obvious to others, influence them socially. For example, if they experience difficulty screening out ambient noise in a social situation, they will not be able to attend to what is pertinent during that interaction. An effective sensory processing system allows individuals to move from situation to situation while adjusting their behavior to match the sensory input they are receiving.

THE IMPORTANCE OF SOCIAL SENSE

Human beings are extraordinary social animals. Our social ability affects every aspect of our experience through every stage of life. The importance of social intelligence and ability cannot be overstated. The smartest person in a company will almost never rise to be a person of high rank without the ability to relate to others and work cooperatively. Social ability is at least as important to a successful life as cognitive intelligence.

The ability to form connections with others is something we take for granted until we have a son/daughter who is without friends. Ask any parent of a child who struggles academically or socially which struggle pains them more. Even the most academically oriented parent will feel greater pain for a child who is not socially accepted.

Richard Lavoie, in *It's So Much Work to Be Your Friend*, writes, "We should never underestimate the importance of this aptitude. In the long run, knowing how to form and sustain relationships is far more important than spelling accurately or mastering the intricacies of a foreign language's grammatical structures." Too many examples show bright people who struggle significantly in their social world and for success in school and careers. This inability to be successful can often be traced back to an individual's lack of a Social Sense.

THE RESEARCH ROOTS

The past several decades have witnessed an explosion of research that spans psychology, linguistics, cognitive science, and neuroscience. With the advances in technology, particularly with neuroimaging methods (fMRI, PET, EEG, and MEGs), researchers are now able to identify neurological markers when brains are connecting. There are marked differences in the brains and bodies of those of us who seem to innately attune with others and those who do not easily make social connections. The research is comprehensive and compelling, and trying to make sense of what it means and how to apply it to help students proved to be a difficult but worthwhile endeavor.

The research regarding mirror neurons was especially pertinent to our program. Neuroscientists identified mirror neurons in the early 1990s. This discovery in a primate lab in Italy showed that motor command neurons fired when the monkey was performing an action as well as when he observed the researcher performing the same action. This discovery allowed neuroscientists to begin to understand that typically developing individuals, when they perceive another person participating in an action, will automatically and unconsciously project that perception into their own motor, cognitive, and emotional representations (as if they were doing it themselves). Mirror neurons allow us to understand others' behaviors, thoughts, and feelings far more directly than previously thought possible. Ramachandran and colleagues proposed that mirror neuron systems are necessary for normal development of recognition, imitation, theory of mind, empathy, and language. They proposed that the communicative deficits seen in individuals with autism spectrum disorders (ASD) were the result of these systems being dysfunctional. In our program we use this information to help us work with students who struggle in interpreting others' emotions and actions. Students with attentional disorders who have intact mirror neuron systems, may still not benefit from this amazing system because of lack of attention to their social environment. Because they are not attending to information, they are not able to capitalize on the gift of this amazing neurological tool, which is our mirror neuron system.

Early in the process of compiling research for this program we came across the work of Richard Davidson from the University of Wisconsin, Madison. His research studies the neuroplasticity and malleability of the brain. Repeated experiences can affect neurocircuitry. Our social interactions significantly change our brains. If social interactions are healthy, uplifting, and end on a positive note, they change our emotional states as well as our brain chemistry. The experiences that end on a high note are incredibly powerful and will be stored in a student's Brain Library to be used during future social interactions.

SOCIALLY SMART

Many assessments are available to evaluate the cognitive components of our social ability. They test the intellectual grasp of social situations, the understanding of social customs, how to use appropriate language to problem-solve, and recognition of different perspectives. They allow us to gather data about these specific areas. The problem with this information is that it gives us

the impression that because they are able to answer questions correctly when sitting across the table from the examiner that they are able to handle social situations occurring in real time. Too many of us have been in meetings where the standardized scores of the students were all within average (or above) range and then we walk outside to the playground and the student is walking aimlessly alone around the perimeter of the lot. The skills and the pragmatic language they can demonstrate during the assessment process are not transferring, and they are not competent in real situations with peers or adults. As therapists, we continually reinforce that being social is not simply a set of cognitive abilities. As such, interventions that are geared solely toward increasing cognitive aptitudes may not result in improved social ability. The noncognitive aptitudes need to be practiced in the midst of real-time scenarios. This approach grew out of our “aha” moment several years ago in which we changed our view, no longer seeing social abilities as a set of social skills but rather as the first “extra-person” sense, your Social Sense.

Chapter 2 – Sensory Integration

The Social Connection

The Social Sense program is unique because it empowers students to become better social participants by first assessing how they fit into their environment (physical, social) and then, based on their assessment, make the best choice as to how to proceed socially. We all react to the *goings-on* in the environment. Our senses pick up the information that alters how we feel when entering any situation. Think about how your body reacts when you walk into an empty school gymnasium versus how that space feels when a basketball game is going on. We teach an understanding of sensory processing and how it affects our participation in our environment, especially our social interactions. The general idea is to use sensory processing as the prism through which to view social interaction, because all the information we collect from the environment, including social information, comes through our senses. Having a solid understanding of how each sensory system works and how they can affect our ability to be successful in our social world is critical.

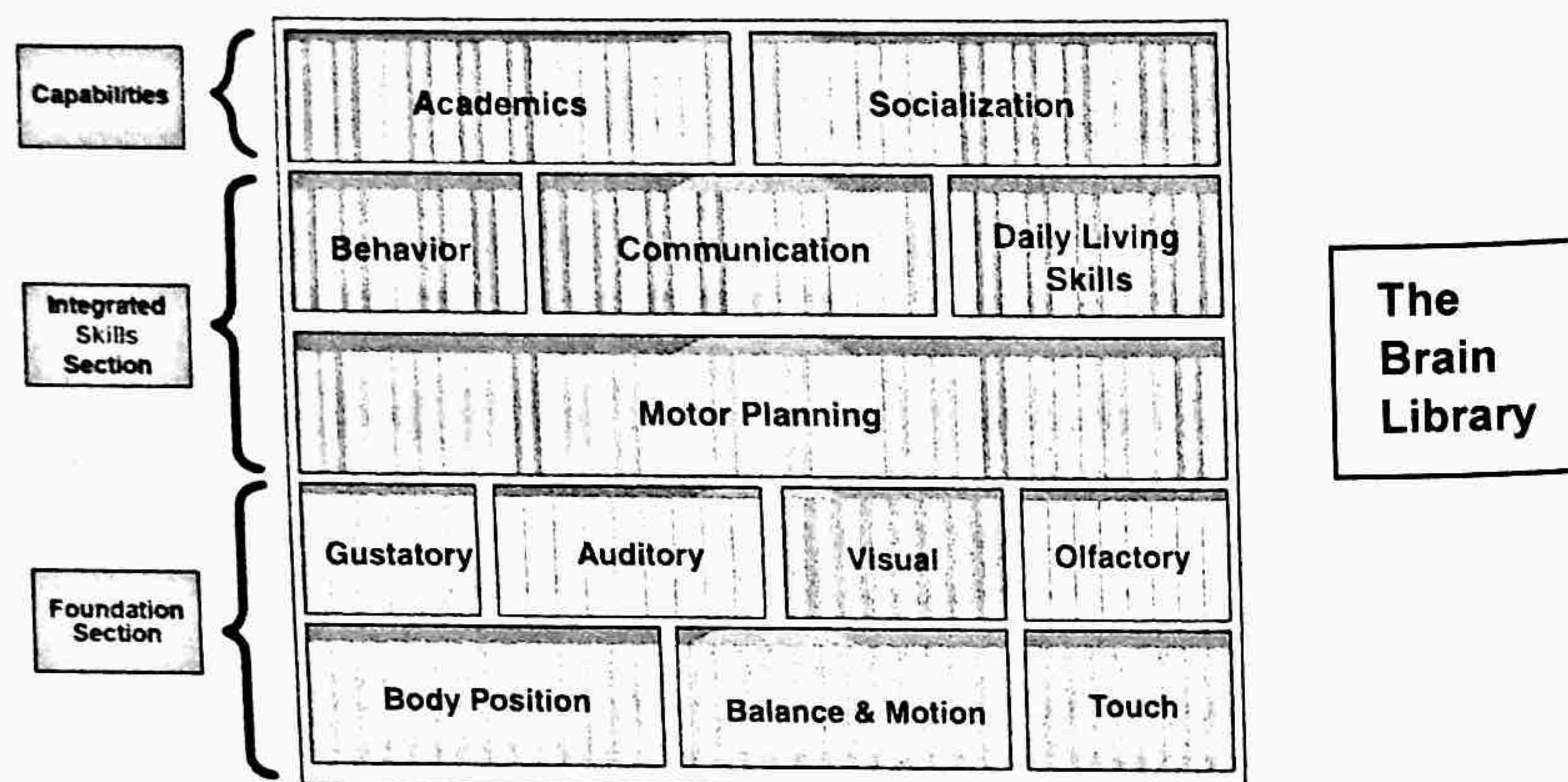
Our first connection socially happens on a “body level” between a caregiver and child through a shared sensory experience. Think about the bonding process. How does an infant bond with a caregiver? Long before we can attach words to bonding and talk about it as a psychological process, we are connecting through sensory input. What happens during the first months of infancy that bonds us to our caretakers? Is it their words, saying, “I love you” or “You are special”? Or is it that they are rocking, touching us, singing to us, holding us tightly, and looking at us at the same time. The rocking, touching, holding, and looking are sensory input. Early input connects us to the nervous system that is providing the input. When a mother is rocking her baby, she and the baby are receiving the same vestibular input at the same time. When a father swaddles his newborn and holds him tightly to calm him to sleep, both the father and newborn are receiving touch and deep pressure input (proprioceptive stimulation) at the same time. When a grandmother holds her granddaughter and sings to her and the granddaughter coos and smiles back, they are both getting visual and auditory input at the same time. The key is that child and caretaker are giving and receiving sensory input at the same time. They are both beneficiaries of the shared experiences. These sensory experiences link the two nervous systems as if they are one. Thus bonding really is two nervous systems getting in sync through shared sensory input, which we refer to as *neurosyncing*.

Sensory processing is woven through all our experiences, thus it is the basis of how we interact socially. When we engage with others in a positive way it is because we are “in sync” with them. It is not simply a positive conversation; it is our nervous system being “in sync.” This nervous system connection starts to occur early in life. Before we are born we are syncing with our mother’s nervous system.

The Social Sense program employs sensory-based activities to promote socialization by utilizing the same mechanism that allowed bonding and attachment as an infant.

BRAIN LIBRARY: WHAT IT IS

The majority of our non-cognitive abilities are rooted in the sensory systems. In order to explain how sensory processing affects our ability to be successful socially, we will use a model of child development called the Brain Library®. The Brain Library was developed as a way to explain to parents and educators how important our early experiences are for future academic and social success (a trickle-up effect). The experiences that we engage in during our early years of life introduce, develop, and refine skills that our brains and bodies will need to access throughout our lives. Each book on the shelf represents an experience (books are metaphors for experiences).



The brain is in a constant state of gathering, storing, and retrieving information while it is developing. The stored books are used as references when presented with a new activity to give context, as well as to provide a framework for how to navigate the current situation. This process of gathering, categorizing, and storing new information in the Brain Library for later referencing is also known as, cleverly enough, learning.

Each of our experiences, beginning in utero, writes books to be stored in our Brain Library. The key to learning is that we build upon our experiences to create more refined books that we can store and use for the next experience. It is through experience that we learn, which makes us more likely to engage in the next similar experience. We learn from each previous experience, which, hopefully, spurs us to engage yet again in the next experience. The experience of engaging in social activities is the root of learning how to be social.

The experiences we engage in during our early years of life introduce, develop, and refine skills that our brains and bodies will need to access throughout our lives. The ultimate goal is to stack children's Brain Library with as many positive social interactions as possible so that they have a repertoire of positive experiences as resources for future social situations. The activities of the Social Sense Program are designed to stack books in the foundation sections of the Brain Library as well as the integrated skills sections with the idea of providing our kids with many resources in their Brain Library to use for future social interactions.

BRAIN LIBRARY: HOW IT WORKS

Our nervous systems are constantly processing sensory information that creates within us a repertoire of input-output responses to the social environment. The Social Sense program provides experiments that allow students to learn new responses to sensory information in their

environment, therefore, storing new information (or books) in their Brain Library. The goal is to create positive experiences/books in their Brain Library. Our social abilities grow from the roots of the non-cognitive abilities of the sensory system.

The books of the Brain Library are organized into three main sections: the foundation section, the integrated skills section, and the capabilities section, as illustrated in the image.

- **Foundation section** houses our basic senses: vestibular (balance and motion), proprioception (body position), tactile (touch), visual (seeing), auditory (hearing), gustatory (taste), and olfactory (smell). Below are explanations for those on the bottom shelf that may be less familiar to many.
 - **Vestibular system:** *Lets you know everything about the space around you. It gives you innate feel of where you are in relation to the ground (am I upright, falling, etc.), how high am I (think looking down off tall building) as well as giving you a “feel” for a room’s space (too large, too crowded, etc.) and where your body is in relation to other things and people in the given space. This knowledge affects you socially because it contributes to your sense of well-being in different environmental spaces. This system works closely with your hearing and visual senses to tell you where you are in the space, what sounds are filling the space, and where the sounds are coming from in the space. These three systems working together are your social radar to help you make sense of new social situations.*
 - **Proprioceptive system:** *Your left-hand-knows-what-your-right-hand-is-doing sense lets you know where your body parts are (say your left hand is over your head). It is crucial when learning to communicate nonverbally, especially as it relates to body language.*
 - **Tactile system:** *Provides information about things touching our body. Much early learning comes through touch, and therefore it lays an essential foundation for understanding the world around you.*
- **Integrated Skills sections** contains the skills that allow individuals to interact and thrive as human beings: praxis (ability to plan movement), which takes up an entire shelf; daily living skills; behavior; and communication.
 - Praxis, which most people refer to as *motor planning*, sets the stage for your other integrated skills. Praxis involves having an idea, planning it, and executing it. This ability is linked to all social activities.
- **Capabilities category** includes the key factors to success in our world: socialization and academics.

All the lessons take into consideration that the foundation and integrated skills sections are crucial for the development of social intelligence. Difficulty processing sensory information can result in differences in social behavior and social communication. Differences in social behavior might include difficulty controlling emotions and anxieties, difficulty with sharing, not just with toys when they are younger but difficulty sharing apprehensions or feelings as they age. Increasing a student’s understanding of how they process sensory information as well as how others process sensory information during social engagement is the basis of this program. The participants in the program are trained to view themselves as scientists learning about their sensory systems and trying to figure out the best way to respond so that they are socially successful. Having them be scientists allows them to ask questions and learn about themselves and others and emphasizes that experiences are not right or wrong; instead, they are simply experiments that garner information for the next experiment or social experience.

Executive functioning skills are taught while children are engaged in sensory social activities in order to give children the opportunity to learn implicitly through engagement in those activities as well as explicitly through the use of visuals and concrete explanations. The combination of implicit and explicit aids helps to optimize learning of social interaction complexities. The idea behind this approach is to stress the learning from several angles by providing students with the visual, the accompanying language, and the experience simultaneously. The goal is to increase the likelihood that it will be stored in their Brain Library for future reference. It is infused with activities that promote the concept that your brain has control over your body in most situations. All lessons are designed to have carryover into the community and provide opportunities to practice positive social habits along the way so those habits become part of the repertoire of tools used in social situations.

Chapter 3 – How to Use This Program

The Social Sense program is designed to consider the sensory processing aspects of social interactions. This approach allows us to set the stage to teach the non-cognitive aptitudes of social ability. In addition, to learning the non-cognitive aptitudes, cognitive-based strategies and concepts are layered into the experiments to reinforce overall learning.

The program addresses concerns that often are seen with students who have high-functioning autism (including what used to be called Asperger's), and ADHD, as well as students who have no formal diagnosis but are struggling to understand their social world. These students might be doing well academically in school but are struggling socially.

The participants are trained to view themselves as scientists trying to figure out their social world. Scientists strive to be keen observers of the world around them and ask questions about what they observe. This program asks students to take on that role of scientist, to embrace the scientific approach, to make observations and do experiments that allow them to draw conclusions about how the world works. The information or data the students collect are meant to provide them with opportunities to learn the how, what, and why of social interactions. The activities are designed to enhance non-cognitive aptitudes (i.e., processing of sensory information, neurosynching, and social insight) while at the same time reinforce the cognitive aptitudes of social intelligence.

Science is ever changing and continuous. Scientists do not stop with one experiment. The Social Sense program will help students understand that becoming more socially comfortable is a continuous journey throughout their lives. Students need to persist as keen observers who ask questions, learn from the situation, and then use that learning to guide future social interactions. In order to continue to refine their social abilities, students must repeatedly put themselves "out there" in social situations, much the same way that a scientist continues to ask questions and experiment.

Because our students do not always have an innate or intuitive understanding of what is socially acceptable, it is not wise for them to just copy the behavior of other students. This approach does not work. They need to have a requisite understanding of the how, what, and why mentioned earlier. For this reason, the Social Sense program encourages them to observe and ask questions during and after social encounters so that they develop an understanding that will make them more successful in future social situations.

As you go through the lessons in this program, keep in mind that the lessons are designed to accomplish the three following goals simultaneously:

1. Increase understanding of how we process the sensory information all around us and how that affects us socially.
2. Attach language to social experiences and use language to interpret and analyze our own social experiences, which sets the stage for use of more complex executive function and cognitive strategies.

3. Attach positive memories to new social experiences that encourage students to take more social chances and generalize their skills beyond a clinical or school setting.

As part of an intake process, a questionnaire can be used to gather information about a student, such as any known sensory sensitivities. This will aide in modifying activities to decrease an adverse reaction and help in modifying some activities. Many times this information is already available in a students file so a questionnaire may not be necessary.

Note: Students who have any kind of seizure disorder should not participate in any activities that involve spinning, including looking at a spinning object for any length of time.

Many children with neurological difficulties, such as autism spectrum disorder and sensory processing disorder, process information in a way that impedes them from readily seeking out experiences that lead to exploration about themselves and the physical environment surrounding them. It is our belief that as parents, educators, and therapists we must set up the physical world (activities) in such a way as to entice engagement and experiences that will write and store books in their Brain Library for their future success.

WHO CAN USE THIS PROGRAM?

This program can be used by professionals from all backgrounds due to its detailed lesson plan format. The program offers a systematic approach for working with students who are struggling with interpersonal relations and understanding the complex social world in which we live. It is recommended and usually much more effective when the lessons are conducted with two instructors, for example, OT and SLP, OT and teacher, teacher and instructional assistant, psychologist and SLP, or behaviorist and teacher. The program is activity rich; therefore, it is best to have two instructors run the program due to the amount of facilitation that has to happen in the midst of the activities and experiments. However, it is possible and has been done with one instructor leading the lessons.

HOW LONG DOES THIS PROGRAM TAKE?

This curriculum was originally designed for a clinical setting where the sessions were typically 60 minutes long. In the school setting, each of the lessons can be divided into two consecutive lessons of 30 minutes each. If you are doing the lessons in the school setting, splitting the lessons into a total of 30 sessions per year tends to work well for the typical school time frame. If you are using the lessons in the school and breaking them into two sessions, it might be beneficial to recap the beginning half of the lesson before proceeding with the second half.

The Science of Grouping

Although no set formula governs how constructive groups are put together, the following points should be considered:

1. **Age.** Try to group students together within a three-year age range. The program was written for students age 6 and older; it has been done with students up to 18. In the clinical setting, 4- and 5-year-old students participated, but clinicians needed to adapt considerably.

2. **Gender.** More dynamic if you can mix girls and boys
3. **Language level.** This program was designed for students who have average to above-average language abilities but are struggling with social communication.
4. **Group size.** The therapy groups can be as small as two and as large as six to seven. By modifying the lessons slightly and with more adult assistance, the lessons can be done with entire classes.
5. **Behavior.** It is important to talk to teachers/parents when a child demonstrates extreme sensory regulation difficulties that result in inappropriate behavior. In such cases, it may not be productive to put that child in a large group, but rather place them in a smaller group of two. In some cases we have recommended direct Speech, OT or behavioral services as a prerequisite to participating in the Social Sense Program.

Note: When parents and teachers are asking why a student should participate in this program you are strongly encouraged to emphasize the Social-Scientist approach of the program. Tell the students that they will be participating in a group and taking the role of a scientist to learn more about their social world. Do not emphasize that the students are not making friends or acting inappropriately socially and that they have to be part of a social group or friendship group.

FORMAT OF THE LESSONS

Overview: Every lesson starts with an overview to you, the instructor, which explains the gist of the lesson. This information provides a clear understanding of the intent and the direction of the lesson. It includes a more clinical description of the concepts focused on during the lesson (e.g., the sensory systems and/or cognitive strategies).

Objectives: Specific learning concepts are expected of students upon completion of the lesson. These concepts will lead to the overall goal of increasing their social sense abilities.

Materials Needed: Everything needed to run the lesson, including supplies for the experiments, is listed.

Who Are We Activity: These activities are designed to help students learn about one another and themselves as well as facilitate fun interactions between participants. It typically includes a warm-up activity that will take 5–10 minutes. The goal of this activity is to help students learn something about the others in the group. The underlying objective is to become comfortable with each other and start to have fun, as well as set the tone for the rest of the lesson.

Experiment: A scientific approach allows students to begin to better understand by giving some concrete feedback that helps explain the abstract concepts involved in social interactions. Socializing involves some highly abstract concepts and subtle nuances that naturally induce fear for those who do not understand how to navigate the scene. When you think of being “social” as an experiment, you can begin to depersonalize your involvement and take on the role of scientist—a person who is asking questions, gathering information, and collecting data. The experiments demonstrate concrete scientific concepts or experiments to further understand what may affect them socially. An abstract social concept is embedded in the more concrete scientific experiments. All experiments have the underlying theme of cause and effect, ranging from concrete (if I keep blowing up this balloon, it will pop) to abstract (if I smile at people, they will see me more positively). The experiments vary from using concrete physical objects to activities that involve their own bodies and their reactions to sensory and motor activities.

All of the experiments illustrate some measurement of cause and effect. At the end of Lesson 1, you will find a scientist log that will help the students follow the general course of the scientific experiment. There are two different logs appropriate for different ages. Choose the one that is the most suitable for your students. Our social behavior affects our world. Each experiment follows this general format:

- Start with a question.
- Students make an educated guess.
- Perform an experiment that allows the student to perceive how to process visual, auditory, gustatory, tactile, and taste information. During each experiment students will discover more about themselves, their bodies, their brains, and the reasons behind their reactions.
- Discuss the findings of the experiment. It can be matter-of-fact or can be lengthy, but always tie it back into the objectives of the lesson.

Social Sense Habit of the Week: Each week a suggestion is given for the student to do a particular social behavior, which, when repeated, can become a positive social habit. These suggestions are listed at the bottom of the homework.

Optional Idiom Activities: An idiom activity that relates to the topic of the lesson is provided. It can be done as a whole group, or the students can work on them individually.

Homework: This aspect is designed to reemphasize the important point of the lesson as well as how to take it out into the community. Homework allows the instructor an avenue to encourage student practice for reinforcement in a natural environment. It is important to notify parents or caregivers that there is homework for every lesson, which is designed to be fun and interactive.

Bringing It Home: What we have found most beneficial for success is initially having a group meeting with parents, giving them an overview of the program, and explaining that the homework should be interactive. An individual meeting with each participant's parents after the programs conclusion to discuss the child's strengths and areas important for fostering social growth is also recommended.

The Core Curriculum Standards were taken into consideration in building the lessons, and you will see many opportunities to work on language arts and science/math standards. The standards targeted can span several grade levels.

Additional activities that relate to the experiment are provided and can be done if time allows.

Another great tool to use, if possible, is to record the students having fun during a lesson and show them the clip at a later date. Kids love to see themselves on video, and these videos can provide another way to emphasize positive social interactions.

FOOD AND FUN!

Although this program is written in lesson-plan format, the lessons are designed to be FUN and encourage spontaneous social interactions. As you know, much of adult social interaction centers around food, which is also important for kids. Encouraging sharing and enjoyment of food is an excellent approach. Healthy treats are encouraged! The premise is to get students together and increase their positive social experiences.

SOCIAL-SENSE[®] LESSON NOTES

Participant's Name _____ Lesson _____ Date _____

Reactions to Sensory input? _____

- Hypersensitive
- Hyposensitive
- Fear Reaction

Related to others in the group? (yes/no) _____

Participant's Name _____ Lesson _____ Date _____

Reactions to Sensory input? _____

- Hypersensitive
- Hyposensitive
- Fear Reaction

Related to others in the group? (yes/no) _____

Participant's Name _____ Lesson _____ Date _____

Reactions to Sensory input? _____

- Hypersensitive
- Hyposensitive
- Fear Reaction

Related to others in the group? (yes/no) _____

SOCIAL-SENSE® LESSON NOTES

Participant's Name _____ Lesson _____ Date _____

Reactions to Sensory input? _____

- Hypersensitive
- Hyposensitive
- Fear Reaction

Related to others in the group? (yes/no) _____

Participant's Name _____ Lesson _____ Date _____

Reactions to Sensory input? _____

- Hypersensitive
- Hyposensitive
- Fear Reaction

Related to others in the group? (yes/no) _____

Participant's Name _____ Lesson _____ Date _____

Reactions to Sensory input? _____

- Hypersensitive
- Hyposensitive
- Fear Reaction

Related to others in the group? (yes/no) _____

SOCIAL-SENSE[®] LESSON NOTES

Participant's Name _____ Lesson _____ Date _____

Reactions to Sensory input? _____

- Hypersensitive
- Hyposensitive
- Fear Reaction

Related to others in the group? (yes/no) _____

Participant's Name _____ Lesson _____ Date _____

Reactions to Sensory input? _____

- Hypersensitive
- Hyposensitive
- Fear Reaction

Related to others in the group? (yes/no) _____

Participant's Name _____ Lesson _____ Date _____

Reactions to Sensory input? _____

- Hypersensitive
- Hyposensitive
- Fear Reaction

Related to others in the group? (yes/no) _____