

Soliloquy: Mediating Language and Communication Development Through Self-Talk

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Introduction

This paper describes an approach to stimulating language acquisition in those individuals whose receptive and expressive language acquisition is limited. We propose a response that we have called soliloquy, exposing the individual to language in a way that mediates and enriches the process of acquisition and conceptual development—summarized as mediated soliloquy (MSL). Mediated learning experience (MLE) is the vehicle utilized that addresses aspects of language awareness, acquisition, and functioning in both children and adults manifesting language deficits of different forms.

While it is necessary to analyze language acquisition to employ MSL, we do not propose a comprehensive picture of language development. We focus primarily on the enriching of the language inventories, and thus affecting learning. MSL is directed toward encouraging and stimulating language development to provide a foundation for cognitive development.

This paper, has five objectives: (1) describing the historical antecedents for the formulation of this approach, (2) proposing the theoretical framework for the

soliloquy method, (3) formulating some of the functional aspects of the process of constructing and implementing actions of the soliloquy, including the structural and pragmatic elements that need to be considered in undertaking its use, (4) consideration of the targets and direction of the self-talk, (5) suggesting a developmental taxonomy of linguistic elements to guide mediation when language is impaired, delayed, or inappropriately developed in certain populations, and the (6) presenting relevant case illustrations of the utilization of soliloquy.

Early Attempts and Limitations in the Stimulation of Spontaneous Language

In the 1960s, Bernstein (1959) proposed the concept of “public language” that referred to the language of the child that was uttered without specification (to particular objects or events) or referent (directed in a particular way). In early implementations of this concept, children were encouraged to talk, but without emphasis on the structural quality of their speech. The emphasis was on increasing the verbal output of the child. An initial response was to do a lot of questioning of children as a way to enrich their vocabularies. This led to an early variant of mediated soliloquy – finding ways to communicate and encourage responses in a systematic way.

The senior author, however, observed that many people spoke to children in childish ways that was presumed to foster understanding. He concluded that this actually impoverished the child’s linguistic environment. They were

presented with content that they did not understand, and models of expressive language that they could (and should) not imitate. Moreover, he observed that once the child did not respond, the adults stopped speaking to them.

In the face of skepticism and resistance, he began to encourage caregivers (parents, teachers, etc.) not to limit their speech only to questions, and when questioning not to stop questioning if the child does not respond. Rather, they should generate rich linguistic structure even if the child does not respond or appear to be focused. He proposed to a group of teachers of kindergarten children in an inner city environment of the US that they use the soliloquy method. It was formulated as a modality of interacting with the child, in front of the child, and made available to his/her auditory and visual system, whether or not the child appears to see or hear what is being enunciated and portrayed, and not limited to those parts of the language he/she can understand. At first this was not accepted, as it appeared contrary to the generally accepted view that the normal developmental progression of speech required a level of socialization before such communication was deemed meaningful, and because it seemed akin to what was considered pathological speech – “do you want children exposed to models of people talking to themselves?”

At this time, various devices were provided for children to elicit their language (for example, a clown whose nose lit up when it was being spoken to, a telephone whereby children would talk to their parents or other communicators, a small train that climbed a mountain as long as the child was speaking, etc.),

and children were encouraged to generate as much spontaneous language as possible. The spontaneity was encouraged by the fact that the clown, for example, did not respond if the child was not talking. On the telephone, the parents “at the other end of the line” were instructed to interact with their children in a meaningful way to show the child that they were listening, but not add anything to the discourse. The parents, however, in this situation tended not to respond to their child’s speech utterances other than make non-meaningful sounds (grunts, “uh huhs,” etc.). It appeared from these experiments and experiences that what was being elicited and reinforced was the language that already existed in the child’s repertoire, and that there was no enrichment provided by any of these devices, or the adult’s utilization of them.

Theoretical Formulation of Mediated Self-Talk: the Soliloquy (MSL)

The field of language acquisition and the relationship of language to the developing of thinking is a well-documented field of study, a thorough review of which is beyond the scope of this paper. However, in recent times, with the advent of information from the newly developing brain sciences some of this complication – especially with regard to the processes of internalization of linguistic/conceptual models – is becoming clarified by research evidence that provide a neural correlate for the provision of mediated self talk, through the medium of mediated learning experience. The theoretical formulation of MSL thus has both behavioral and neurophysiological dimensions.

At a very early stage in development, as the child becomes aware of the stimuli and mediators in the environment, language understanding is experienced. Human beings “talk to themselves” as they consider, formulate, and review their experiences in the immediate and in their past and anticipated future. Children learn speech models as they observe and listen to the verbal interactions around them, first as a passive experience and gradually experimenting and imitating what they hear, after presenting itself in the form of deferred imitation—that also has direct neurological correlates (Skoyles, 2008; Rizzolatti and Arbib, 1998). Imitation does not solely occur in response to sensorially experienced perception, but also as a consequence of internalized models which are potentially expressed imitatively—divorced from direct contact with the model (Liberman and Mattingly, 1989).

Recent research has shown that mirror neurons are triggered in the child’s brain upon hearing language, as if the child were using these structures him or herself. The language area in the brain is particularly rich in these mirror neurons. Functionally, the MSL process orients children to the environment, receiving information about what is going on around them, and thus becoming more amenable and focused on the mediational potential for learning (elaborating, deepening, etc.) their direct experience. The provision of mediated learning experience (MLE) (references to be added) becomes an integral contributor to learning to develop communicational processes. In our formulation, language precedes thought...first you speak and then you think.

For example, there are numerous studies that show that the articulatory muscles (in the throat) are activated during mental activities where speaking is not required, producing sublingual speech. Further, there is neurophysiological evidence (Fogassi and Ferrari, 2007; Rizzolatti and Craighero, 2004) that the brain is activated and experiences structural changes from such activity.

From this perspective, MSL can be considered to be a relevant and necessary aspect of human experience which affects not only the expressive language of the developing individual, but also enriches the receptive ideational and conceptual processes extending to cognitive awareness, emotional behaviors, and moral and ethical aspects of human interaction. These ideational processes precede and are stimulated by the receptive and expressive phases of language, and provide bridges to cognitive and social development.

The Function and Implementation of Soliloquy

MSL takes two directional forms—as language generated by the adult and “directed” toward the child, and as child generated language that is not directed toward a definable target, but is related to the presence of a potential recipient. From the adult perspective, MSL an intentional act that is undertaken explicitly (on the part of the mediator) and implicitly for the child to enrich the linguistic environment and experience of the child, and expose him/her to an intensive experience which is not conditioned by the expectation (by either party) of

receiving a response. It is the act of talking to oneself (on the parent or caregivers part) designed to be overheard and related to concurrent activities that the child observes that are undertaken by the adult. The adult exposes the child to speech in a very intentional (goals oriented, systematic, highly focused, etc.) manner, directed toward the child whose language needs to be stimulated, or where there are observed or presumed functional or developmental deficiencies. In this sense, MSL is related to more broadly based developmental goals and/or the needs of the child. It is thus an early and continuous form of mediated learning experience (MLE). For the child, the soliloquy is a form of self talk that rehearses and practices linguistic formulations of experiences that allow the child to experiment, self-reflect, and enrich his/her interaction with the environment, and communicate “implicitly” to the “other.”

Structural Elements: We begin by describing some of the structural elements that need to be included to undertake the use of MSL. We will describe them from a mediational perspective here, as the focus of intervention, and then consider them from specific linguistic and structural perspectives. The primary “operational” framework for MSL, particularly from the adult-generated direction is the accompanying of words with the execution of certain acts that are experienced and potentially meaningful for the child.

The functional dimensions provide the interactional structure for experience:

Enunciation: The soliloquy enunciates an action that is performed in front of the mediatee, and done in such a way as to draw his/her attention, but not with the intention or expectation of a response or repetition of that which has been enunciated and acted out. The enunciation of the act is said loudly, with a rhythm and embellishment that accompanies the act, and done in a repeated manner—both at the time of the action and in further opportunities to perform and experience the act. "I TAKE this ...from the TABLE...and place it ON THE CHAIR!"

Rhythm: The rhythm of the act, combining words and motor actions, links the linguistic structure to the physical action, in a salient and interesting way... "I put it on the table, then I put it on the chair, and it ends up on the floor; It goes from table to chair to floor" with an inflection and prosody which creates a "sing/song" quality to the action that has the potential to resonate in the mind of the child. Parents who do not raise their voices to make their children attentive to what they are saying may miss important opportunities to convey importance, focusing, or the special quality of that which is being experienced. This should be accompanied by exaggerated gestures, facial expression, and alterations of vocal pitch and amplitude.

Substitution: The act may be substituted for, or accompanied by, the sound that the act may create. For example, tearing a piece of paper can be accompanied by making the sound (in an exaggerated way) of the paper tearing. One can make the sound without the actual act of tearing,

but using expressive gestures. Sounds, tactile experience, gross motor movements, etc. enlarge the repertoire of the child. They move the child away from a dependence on visualization—that may have neurophysiological correlates, activating various regions of the brain—and bring in other elements linked to language. This is consistent and confirmatory of the new knowledge regarding mirror neurons, whereby activity in one modality, and at one moment in time, stimulates further activity across modalities – going from visual to motor to linguistic, and back and forth to enlarge experience, encouraging imitative behavior as a neurophysiological phenomenon.

Repetition: Repeating an act, over time and in different venues, with minor variations, and explicit verbal differentiation of why, what, how, etc. the act is being repeated is an important aspect of mediation. The repetitive quality can also be enhanced by enunciating acts to be performed prior to their execution...”Now I am going to do something that I did before, but this time I will do it a little differently...look how I am doing it, not like a did before...(with specific explication of the actions undertaken), etc.?”

Tense and Referent: These are linguistic elements that can be modeled and conveyed in a systematic way through MSL. We refer to the inclusion of focus and differentiation on past, present, and future, and the specifying of omitted or imprecise referents for objects or activities (the

he's, she's, they, it, there, etc.). This focuses attention on the nature of the child's experience, makes more precise their understanding of objects and events in their interactions with the environment, and eventually contributes to clear and interactive verbal experience with others.

"Yesterday I went to visit grandfather, today he is going to come to visit us at our house." Grandfather's house is near the sea and our house is in the city, etc. And our Aunt, my sister, lives on a farm in the country, with cows and sheep, etc."

Pre-linguistic elements of MSL are an important prerequisite to the language development process, and an essential element leading to the provision of MSL. It develops a readiness in the child to attend to facial expression (in particular the peribuccal zone). This stimulates the natural process of producing sounds in response to the facial expressions and imitation of sounds emitted by other human "communicators." This is an early – within the first few weeks of life – development and occurs naturally in infants as they learn to focus visually (and auditorally) on the world of stimuli around them. As the infant is held and fed, as the parental caretaker talks to them and makes a variety of sounds, the process of focusing and imitation is stimulated and reinforced. To make this a process of MSL, the parent/mediator undertakes a systematic and repetitive series of actions to intensify and elaborate the responses, and as the child's awareness develops converts it into qualities of soliloquy by

commenting upon what is occurring, why it is occurring, what is changing, etc..

In such instances, the mediator holds the infant in such a way that the face is directed toward the mediator, at a distance of about 16 inches, holding the head so that eye contact occurs, and moving the head slightly to restore contact if the infant's gaze shifts away. Then the mediator exaggerates the shape of the mouth, forming and emitting sounds: first, bah, bah, bah (widening and narrowing the lips, but with open mouth), then boo, boo, boo (with the lips formed into a circular shape), and then bo, bo, bo (with the lips in an exaggerated circular shape and the lips protruding and extended outward). This is done repeatedly, several minutes at a time, over extended time periods, eventually widening and varying the sounds and shaping of the mouth. Within a relatively short time, one observes the infant anticipating the event, starting to shape the mouth – even as his/she is picked up and placed in position, and mimicking the peribucal movements of the adult as the sounds are being produced. One also observes changes in focusing of the gaze, becoming more consistent over increasingly longer time spans. Relatively soon, this behavior generalizes into the infant attending to other individuals emitting sounds...looking around to find the source, watching the faces of those speaking, and imitating the motor facial movements associated with the sounds

heard. This represents an early recognition of the peribucal movements that are related to speech production.

Incorporating Specific Linguistic Elements: A Taxonomy of Language Development

The linguistic elements of MSL that must be focused on and adjusted appropriately are:

- Appropriate sentence length
- Intentionally selected and phased introduction of new words
- When to repeat words/phrases/sentences
- When to introduce new grammatical structures
- Use of idioms and colloquialisms
- Prosody of enunciated acts
- Pragmatic skills

In this way, new language structures are introduced to the child, and linked with cognitive elements of the experience. Central to the structural elements is the need to introduce concepts, and linkages bi-directionally – from direct observations of concrete experience to concepts (linguistically formulated) and from concepts to direct observations (again, linguistically formulated).

The Development of a Taxonomy: The importance of a taxonomy of language development aspects is important in implementation because of the need of the mediator to guide and calibrate mediational interventions. The taxonomy should reflect three related elements: (1) the structure of language, (2)

age and developmentally related capacities in the child, and (3) contextually related elements (what is required and appropriate in the setting where the linguistic action occurs) (Bernstein and Tiegerman-Farber, 1997). For the purposes of implementation of soliloquy, the taxonomy must be functional, in that it helps the provider of the language experience to organize and present the necessary linguistic structures and experiences to the child. The information from such a taxonomy is the “content” of the production, including aspects of language that should be included in the soliloquy. It should lead to orienting the provider to what to say and how to say it. The mediational element refers to guiding the provider in when, where, and how to produce the language—focusing, elaborating, repeating, emphasizing, and modifying what is conveyed to the child. Mediated learning experience (MLE) has been described extensively, indicating parameters of intervention that facilitate and enhance the learning process (see Feuerstein, Feuerstein, Falik, and Rand, 2002; 2006).

Language development, particularly in the first three years of life, requires that the child master phonology (the recognition and articulation of sounds), semantics (understanding the meaning and usage of words), morphology (the structural elements of language—prepositions, suffixes, conjunctions, etc.), syntax (the building of sentences and use of appropriate structures reflecting time, space, referent, etc.), and pragmatics (the use of language in social interaction). All of these must be incorporated into the produced soliloquy.

A Sample Taxonomy Incorporating Both Linguistic and Meditational

Elements: We present an example of such a taxonomy to show the inter-relationship of linguistic, mediational, and functional elements.

Ages in months and years ▼	Phonology (Mediation of sounds)	Semantics (Lexical mediation; understanding the meaning of words)	Morphology (Mediation of prepositions, suffixes, conjunctions)	Syntax (Mediation of building a sentence: words in structured setting)	Pragmatics (Mediaton of interactional patterns)
0-1 months	<ul style="list-style-type: none"> - imitate the vocalized sounds of the baby - play with tongue protrusion - encourage facial imitation - make vowel sounds (<i>ay, oy, uy</i>) with increasing and decreasing intonation --clear view of the mediators face, eyes and mouth is a must 	<ul style="list-style-type: none"> -introduce meaning to the child's vocalizations 	-	-	-
1-4 months	<ul style="list-style-type: none"> - mediate repetitive babbling (<i>pa-pa-pa; ba-ba-ba</i>) -mediate canonical/variegated babbling (<i>ka-da-tu-ba, te-te-te-ne-ne</i>) with your face close to the baby so that it would see your peribucal area well -imitate what child itself babbles 	<ul style="list-style-type: none"> -mediate the childs name 'Adam' 'AAAdam' many times -attribute meaning to the noises of the environment ('Yes, it was an ambulance, <i>Ne-noo, nee-</i> 		<ul style="list-style-type: none"> -<i>It is a doll. A DOLL.</i> - 'Baby talk' should come naturally: with a "cooing" pattern of intonation, <i>high in pitch, with</i> 	<ul style="list-style-type: none"> -mediate parent-child, child-parent turn-taking in babbling (<i>dyadic interaction</i>) If this „answering back” starts to exist, mediate with intention that by using speech

		<i>no, nee-no,</i> 'an ambulance)		<i>many glissando variations</i> that are more pronounced than those of normal speech	(babbling) he can be effective
3-6 months	- play with hand put on and taken away from your mouth: (<i>ba-ba-ba-ba</i>) in front of the child - play with your lips with your fingers: „ <i>br-br-br</i> ”	- label and show objects and persons to the child (<i>doll, dad, car</i>) Important to label first and then show the object. –create possibly one or two syllable words -introduce animal sounds	-	<i>-It is a doll. Doll.</i>	-introduce <i>tryadic interactions</i> and joint gaze between baby and parent and the object
6-9 months	-continue the above mentioned	- introduce 2 syllable words and show objects -mediate <i>telegraphic speech</i> : ' <i>Daddy bye. Bye, went away. Mummy sits. Sits.</i> ' with the intention of drawing attention to verbs (actions)			
9-12 months	Clear and slow articulation should				

	be continued to help to avoid articulation deficits				
18-24 months	Like above	Our aim is to go for „ <i>naming explosion</i> ” – so that the child would feel a deep drive to name and label everything in his/her environment	-start to mediate the genitivus (<i>'My book', Kate's bag mine hers'</i>) -emphasize the plural (<i>„catS, dogS</i>)		
30 months	Like above	A 30 month old child has about 500 words. Try to go beyond telegraphic speech (<i>baby sit, daddy do</i>) and introduce and imitate longer words. Try to increase MLU (<i>mean lenght of utterances</i>) by putting prepositions and conjunctions in front of and between words	-Try to increase MLU (<i>mean lenght of utterances</i>) by putting prepositions and conjunctions in front of and between words (<i>IN the house; the rabbit AND the tiger</i>) – your young child will learn prepositions by hearing them used over and over again, in the correct context; prep.s are said to appear as soon as a child can produce two word utterances the order of mediating prepositions is the following:		-Encourage to take turns in interactions: appropriate turn-taking behaviour and ability to add new info to the ongoing topic -Encourage to stay on the same topic, to maintain a topic for a longer time

			-space localisers (<i>On, in, out, at, on top of, in front of etc.</i> <i>-to, from, out of</i>)		
36 months					-Mediate the importance of stating the message clearly; -Create a sensitivity in the child towards the needs of its listeners: even a 2 year old may repeat or change the form of an utterance if his partner does not respond

Creating a Cognitively-Based Taxonomy: Flexibility and innovation in the provider must be built through an understanding of the cognitive aspects of language. This is conveyed through the following, with emphasis in the training and consultation on being systematic, repetitive, and goal oriented (incorporating parameters of mediated learning experience (MLE):

Semantics: The focus on meaning in language—the conveying of meaning to the child of the activities being described and elaborated. This occurs through the systematic use of words that convey increasingly precise levels of meaningfulness for the child.

Nouns: Provide names for objects and events that enable to child to attach labels to that which is experienced. The acquisition of verbal labels is an important dimension of input level cognitive functions (reference).

Verbs: Denoting actions that are occurring or that can occur. Directs attention to the active aspects of experience. This element also includes tense (past, present, future) and causality (something or someone does something that affects something else).

Adverbs, Adjectives: Words that add qualities to the labels and actions described, to embellish, specify, quantifies, or qualifies the object or action. Examples are the “black” cat, the “speeding” car, the “tall” girl, etc.

Prepositions: Words that show spatial (space), temporal (time), or logical relationships of its object with the rest of the sentence. Examples are above, below, against, as, at, during, with, except, etc.

Pronouns: A substitute for the noun. In language development, extends the communication to include referents that are in the mind of the child but not identified, creating some degree of cognitive distance. Examples are I, me, she, he, it, you, they, them, etc.

Conjunctions: Words that join other words, phrases, or clauses. They provide a sense of continuity in the language, and thus add to the experience of consistency and meaning. Examples are such words as and, as, because, for, since, until, etc.

Introjections: A less formal aspect of language, these words convey aspects of emotion, and are thus a meaningful part of social communication. They can often start a communication, or highlight some emotive aspect of what is being experienced. Examples are such “words” are aw, ay, bah, eh, hurray, oh, ah-hah, oops, phew, ugh, wow, etc.

Syntax: The grammatical arrangement of words in a sentence, presenting the structure of language that is anticipated and understood, as an enhancement of both focus and meaning. The semantics and syntax of language can be considered the “superordinates” of structure, to which the various specific elements contribute, and are appropriately organized.

For the parent or caregiver, who may not be familiar with the developmental or structural aspects of language, or who may be emotionally or interactionally “distracted,” some training and/or consultation is needed to become familiar with and practice incorporating elements such as these into their utterances. Our preliminary attempts to use this model with parents indicates that it is a difficult, necessary, and ultimately successful task to provide training and practice, and that information on language structure and ways of conveying it in conversational and verbal utterances is needed.

Function Leading to Cognition: Language develops along several parallel tracks, each comprising particular skills developed from active experience, and contributing to one another. The soliloquy activities must address each of these spheres as necessary:

- Articulation: accompanied by phonemic awareness and production
- Enunciation: of objects and acts
- Internalization: of that which is articulated and experienced
- Conceptualization: developing meaning of what is experienced and pragmatic/syntactic usage, with spontaneous elaboration.
- Formulation: of internal states accompanied by changes in facial expression, proper gestures related to feelings, etc.
- Temporal reference: incorporating past, present, and future into verbal interactions.

We have produced a monograph (Feuerstein and Falik, 2009), and are in process of revising and elaborating it, providing a detailed description of each of these elements, with examples of verbal constructions, and other elements of linguistic development, consistent with the taxonomy and implementation objectives described above.

Case Illustrations of the Implementation of Mediated Soliloquy

I. Max was an 8 year-old boy with serious cognitive and linguistic delays, with symbiotic bonds to his mother: He had been conventionally tested at the age of 5 and the results were devastating for the mother: an IQ of 44. In the consultation the mother was told “the boy will never be ‘regular’, there is nothing to do, and it is better if she gives birth to an other baby...” Given this feedback, the mother stopped talking to him. The parents felt helpless when looking at the boy: each time when they wanted to communicate with him lack

of reciprocity or inadequate response on part of the boy made them very sad. By the age of three, he usually used two-word sentences “Papa sits”, “Dog bites,” and was limited to six or seven themes—repetitive topics that he liked.

After two days of assessment it was established that he could respond and learn. The family was taught some of the essential elements of MLE and language development, overcoming their belief that they had simply “constantly talk” to the child without expecting any response. This gave them a sense of initial “relief”—they could relax a bit. They acquired two principles: first, the importance of verbalization of objects, feelings and acts—because “when we verbalize it is a higher mental act than motoric actions, and your son can and will understand.” Secondly, that the rhythm of their speech has to be adjusted to the boy’s condition: they have to speak more slowly, and with more emphasis, so that he will attend to what they are saying, even if he does not immediately signify that he is doing so.

They were also instructed to pick on some pre-determined experiences and topics to apply these principles to—so that they would do it systematically and repetitively. They decided to talk to the boy about weather conditions (rain, sun, clouds, etc) that they were all experiencing together—regardless of his positive or negative reactions. In the beginning they focused much more on themselves than to their son, their goal was to speak as much as possible. They broadened the focus from the weather—the mother repeated thousands of times the names of the objects in the bathroom, in the living room, their functions, their position, she talked about all the things she did or felt in short sentences. She spoke to the boy even when he was asleep, so much she wanted to cure him! She believed that the intensity of “MLE” has to be high, so when they were at a public place, she whispered what she saw into the ears of the boy.

Three and a half months later, when they returned for further consultation, the boy was speaking constantly. He even started to speak to his

teddies and wanted to teach them talk. His speech was fluent and had a great conceptual repertoire.

II. Elisa was 5.5 years old and still couldn't talk. She had 7 syllables she was ready to use – the first bit of seven words. She had them for years but no qualitative or quantitative changes had occurred. She had speech motor problems and it was very hard for her to formulate and articulate even these seven syllables. She received speech therapy from the age of 3, working on her dyslalia without success. When she started to work with therapists who were trained in mediated interactions, with the application of MSL, it was apparent that Elisa showed strong affection to certain topics. She was interested in many of the usual interests of a girl of her age. Thus, the therapist's self talk was oriented toward the things and topics in her self talk that Elisa liked. She was tempted her with all kinds talk about puddings and cakes—Elisa like to “treats”—with stories of Strawberry Shortcake (Elisa's favorite cartoon figure) and ponies, the favorite animals of Elisa.

After the first week Elisa started to feel a strong need to absorb and imitate these overheard stimuli of her wonderland – and 3 months later she was fluency and articulation has significantly improved. With little or no attention paid to these dimensions, Elisa acquired skills in the semantics and also the syntax and pragmatics of her linguistic formulations. It was observed that her fluency seemed to unlock an already acquired understanding of the structure of language. The therapists commented that now she was much more amenable to working on her articulatory problems, and rapid improvement was experienced.

III. James had 3 years of therapy oriented to mediated learning experience and modifying environments. He had Down syndrome. He received mediation from his parents, therapists, and teachers. He received several lessons of FIE-Basic each week. By the end of the third year it was felt that he may have been

“overtherapised.” Whenever he sniffed strong intentionality on part of the other party, he closed himself.

At this point MSL was applied. His parents other significant adults in his life were encouraged and trained/supported to enlarge and make their inner speech accessible for the boy, without demanding that he respond or acknowledge in any way. (This was very hard for them to do!) Their monologue was still structured in terms of important conceptual baselines (color, shape, position, size, direction, number, function, smell, taste, speed, weight, temperature, etc.). It was also oriented toward issues of morphology (suffixes, prepositions etc.), in terms of prosody, to deal with his problems with language acquisition, attention and spatial and temporal orientation.

Even though James was not required to respond, not to react, not to focus, after 5-10 minutes of an intervention oriented to the objectives of MSL, he himself asked to be part of the monologue and turned it into an interaction. A pattern developed for him so that when he was observed to decrease in expressive language production (at home, in the classroom, in his FIE lessons) the MSL strategy was applied, and he responded accordingly and insightfully, improving his functioning.

The last aspect of James’s experience identifies another element of the MSL approach that must be attended to. With the successful implementation of MSL, children will initiate their own self-talk, that should be observed and assessed for modifications in the adult’s self talk. Eventually, interactions with the child can be initiated, taking the language development and production issues farther into a cognitively oriented format. This implies talking with the

child about the nature of the interaction, and engaging in a structured language experience that advances the goals of mediation.

Summary and Directions for Further Research

This paper describes the need for language development in young children, and the value of providing it in a mediated learning experience context. The new concept presented is that of “mediated soliloquy” as an approach to stimulating and enriching language development. The concept requires that the provider of the language experience be familiar with developmental and structural aspects of language, understand the cognitive elements of such an approach, and present the experience to the child in a mediational format.

The authors are encouraged that without exception, those who have been oriented to early experimental versions of this approach report consistent, strong, and relatively rapid improvements in the language functioning of the children to whom the approach is presented. Importantly, such “results” have occurred even with children who present relatively severe special needs (autistic spectrum, pervasive developmental disorders, Down syndrome, and the like) and have been non verbal well into their latency years (contrary to traditional conceptions of “critical period”).

What is now needed is controlled research, examining various dimensions of the approach, with diverse populations of age and diagnoses, under various conditions of intervention. In the expanded version of this work, represented by the published monograph (Feuerstein and Falik, 2009) we add elements of

visualization and gesture, and elaborate on the parent/provider needs for training and support, both of which should be subjected to research to determine their contribution to outcome effects. We are confident that such research will illuminate important effectiveness dimensions, provide further support and encouragement for the use of the approach, and identify further elements that should be incorporated into the methodology.

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