 Return to representative papers

(N.B.: This is a "nearly" exact copy of an article that we recently published in Mental Retardation. It has not been rigorously proof-read so there are some typos and some of the keystroke sequences in Table 2 may be slightly inaccurate. Please write if you want the actual article. -S.H.W.).

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A Validated Case Study of Facilitated Communication

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Abstract: The case of a 13-year-old boy with autism, severe mental retardation, and a seizure disorder who was able to demonstrate valid facilitated communication was described. In three independent trials, short stories were presented to him, followed by validation test procedures with an uninformed facilitator providing physical support to the subject's arm. In Trials 1 and 3, several specific answers were provided that clearly indicated that the young man, not the uninformed facilitator, was the source of the information. Moreover, some responses seemed to imply that the subject was employing simple inferential and abstract reasoning. This case study adds to the small, but growing number or demonstrations that facilitated communication can sometimes be a valid method for at least some individuals with developmental disabilities.

Recent evidence has been reported by a number of investigators implying that individuals previously diagnosed with significant developmental disabilities-including profound mental retardation secondary to cerebral palsy, autism, and other related disorders-may have remarkable literacy and intellectual abilities that have been masked by their disabilities (Biklen, 1990,1992; Biklen & Schubert, 1991; Calculator & Singer, 1992; Cardinal, Hanson, & Wakeham, 1996; Crossley, 1992; Crossley & Remington-Gurney, 1992; Heckler, 1994; Intellectual Disabilities Review Panel, 1989; Vasquez, 1994). These competencies were reportedly demonstrated by means of facilitated communication, a method of communication in which a "facilitator" holds the hand, wrist, arm, or in some cases only touches the shoulder, of the individual who spells out his or her thoughts on a keyboard or alphabet board. A small number of individuals who have demonstrated this surprising literacy have been reported to become subsequently independent in their ability to express themselves through these augmentative methods (Karp, 1993; Karp, Biklen, & Chadwick, 1993). However, the majority of individuals who are believed to be valid communicators via facilitated communication require on-going physical assistance in their use of the keyboard.

The need for physical support, combined with apparent unexpected and remarkable literacy, has resulted in much controversy around the true source of the communication. Are the individuals with disabilities actually communicating, or are their responses consciously or unconsciously being influenced by the person offering the physical support? Several empirical studies have shown significant facilitator influence in many cases (cf. Green & Shane, in press; Jacobson, Mulick, & Schwartz, 1995; Rimland & Green, 1993; Shane, 1994).

However, in a small number of cases, evidence indicates that facilitated communication may be a valid means of communication for some individuals with disabilities (Calculator & Singer, 1992; Cardinal et al., 1996; Crossley, 1992; Heckler, 1994; Intellectual Disabilities Review Panel, 1989; Karp, 1993; Karp et al., 1993; Queensland Report on Facilitated Communication, 1993; Rimland & Green, 1993; Sheehan, 1993; Sheehan & Matuozzi, 1994; Vasquez, 1994), and this evidence demands further exploration of the phenomenon of facilitated communication.

The following account offers evidence of valid facilitated communication in two of three independent information-passing procedures from a 13-year-old boy diagnosed with autism. These procedures involved (a) the story phase, in which a short story was read to the boy with the uninformed facilitator out of the room; (b) a consolidation phase, in which the boy was presented with questions about the story by the experimenter who originally read the story to him; and © the test phase, in which the boy answered questions about the story with physical support given by the uninformed facilitator. The second and third trials involved the presence of third-party "referees," whose presence offered independent verification of the procedures and results.

Method

Participants

Kenny was a 13.58-year-old boy at the date of the first test trial. His developmental status independent of his performance with facilitated communication was characterized by a diagnosis of autism, severe mental retardation, and a history of seizures. His most recent formal psychological evaluation, performed when he was 10 years of age by a school psychologist, resulted in a Full-Scale IQ of 31 (36-month age equivalence) on the Stanford-Binet Intelligence Scale. Results on the Vineland Adaptive Behavior Scales (Sparrow, Balla, and Cicchetti, 1984) can be found in Table 1. As shown in this table, these scores either he]d constant or improved slightly when the Vineland was re-administered 16-months later, and again when Kenny was 15.75 years of age. (Given the limited improvement that Kenny showed on the Vineland between the first and second administrations, we repeated the scales when Kenny was 15.75 years of age. Our intention was to reveal the limits of Kenny's improvement discounting any alleged abilities associated with facilitated communication. Indeed, the gap between his Vineland profile and his chronological age [CA] continued to grow significantly wider.) Kenny's verbal production at the time of the facilitated communication testing procedures was almost entirely echolalic, perseverative, and/or seif-stimulatory in nature (he would often repeat words such as "fishy-fishy" or "NBIS-NBIS" (the acronym of a local bank), with no apparent meaning attached to these utterances). He had fewer than 10 words that he occasionally used functionally (e.g., he would say "soup" when hungry, call out "daddy" when trying to gain adults' attention). These words were neither used frequently nor precisely. In addition, Kenny was inconsistently able to say aloud brand names of products when he saw the logo or labels, such as "Old Milwaukee," "Honda," "McDonald's," and others. However, his ability to identify these words seemed to decrease precipitously when they were typed or written independently of the actual label or logo. Kenny's complete functional expressive language vocabulary assessed when he was 13.5 years old was as follows (perceived meaning in parentheses). *help me* (used for assistance in dressing and use of toilet and occasionally for other self-help needs); coke (used when requesting a drink), coat on (used when requesting an automobile ride), *truck* (also used when requesting an automobile ride), bus (used at school, seems to be a question like "Is it time to go home?), *no* (seems to be used appropriately in a variety of situations), headphones (used to request music/tapes), soup (used to request something to eat), and daddy (used to elicit adult attention; also seemed to be used to express "yes").

Despite his appearance of severe cognitive and functional impairment, Kenny had been integrated into regular education classes, and his family and primary facilitator at school indicated that he was successfully completing Grade 6, and subsequently Grade 7 academics with the use of facilitated communication and was reported to be maintaining an A to B grade average.

The uninformed facilitator in the protocol was Kenny's 1-to-I school teacher, who accompanied him throughout his regular school day (approximately 30 hours weekly) and had been working with Kenny for approximately 15 months prior to the first experimental session. In fact, this individual first introduced Kenny to regular use of facilitated communication. Kenny and his facilitator typically use facilitated communication frequently and intensively throughout the 6-hour day, including lengthy writing assignments, homework, and other related school work. Her initial exposure to facilitated communication consisted of (a) attending a small number of seminars in which proponents of facilitated communication presented their subjective views of how to introduce and promote the use facilitated communication and (b) spending time developing the technique with Kenny. When asked how they developed their use of facilitated communication, the facilitator indicated that she and Kenny simply "figured it out together day by day." In addition, the facilitator had several opportunities to use the technique with other individuals alleged to be competent with facilitated communication during this period. Hence, she had a great deal of both depth (i.e., amount of time using facilitated communication with Kenny) and breadth (i.e., number of different individuals facilitated) of experience by the beginning of the current protocol.

The experimenter in the protocol (the first author) had been a consultant for Kenny's school program for approximately one year prior to Kenny's introduction to facilitated communication. It is noteworthy that the experimenter was originally quite skeptical about facilitated communication, as can be seen from the following newspaper account:

Michael Weiss, a clinical psychologist who has worked with developmentally disabled children in New Bedford, is also concerned about facilitated communication. "There's a rich tradition in how we judge whether something is true. . . . It gets reviewed by peers and has to pass a certain standard," he said. "What I'm unnerved about with the facilitated communication people is that there's almost a refusal to adhere to this standard." Asked why he thinks Dr. Biklen and company won't do such studies, Dr. Weiss replied, "What rings true in my ears is that the thing is a bloody hoax. (Experimental *technique,* 1992)

Indeed, there was a great deal of pressure applied by the experimenter for validation of facilitated communication, which culminated in the following protocol (see Weiss & Wagner, in press, for an expanded account of the events leading up to these validation procedures).

The experimenter's only experience with facilitated communication prior to the following protocol was attendance at one seminar introducing the technique and extensive conversations with individuals using it. In addition, although the experimenter had numerous opportunities to serve as a facilitator with Kenny and others prior to the protocol, he had not developed a subjective sense of competence as a facilitator, nor could he give a first-hand endorsement or account of what the technique "feels like." Conversely, the experimenter could not discern his own intentional manipulation of Kenny's hand when serving as facilitator.

Referees were used in the second and third experimental sessions to independently verify that the facilitator

was indeed uninformed of the story contents being presented to Kenny. During the second session the second author served as referee, and during the third session the referee was a television producer from medical News Network (a cable TV news service pursuing a story about facilitated communication). During the third session the TV producer-referee both wrote the short story used as the probe information during the protocol (assuring no prior exposure of the story to the facilitator) and supervised the facilitator's departure and return to Kenny (assuring no opportunity for the facilitator to hear the story).

Materials and Apparatus

Kenny was evaluated on three different occasions during which a short story was presented. These stories were modeled after those used by Kohlberg (1983) in his studies of moral development and are shown in Table 2. These stories were chosen because they were relatively short, contained several specific facts, were cross-culturally meaningful, and had a "moral" to the story, which would allow for the possibility of inferential descriptions of content. The first two stories were written by a research assistant, and the third story was written by a television producer from Medical News *Network.* Kenny's responses were recorded on the same word processor with a standard keyboard.

Procedure

Three independent trials of information passing were performed. In each trial the young man was presented with (a) the story phase, in which a story was read aloud by the experimenter while being typed into the word processor (in Kenny's view) and then read aloud a second time. (Prior to the initial story presentation, the test facilitator was escorted far out of the room to ensure that she was unable to see or hear any of the information presented); (b) a consolidation phase, in which the boy was questioned about the story by the experimenter, who served as a facilitator to elicit answers to the questions; and © the test phase, in which the boy answered questions about the story that were presented verbally by the experimenter (who always stood behind and out of view of Kenny and the facilitator), with physical support given immediately at the wrist by the uninformed facilitator. (We make no attempt to describe the nature of the physical support being offered by the facilitator, other than to say that she supported beneath Kenny's left wrist with her cupped open left hand and that she indicated that "resistance" was offered to Kenny's movement. This technique is consistent with descriptions offered by Crossley and others. However, the technique has not been sufficiently studied to give an accurate account of the underlying biomechanics involved.)

As indicated previously, the experimenter had no subjective feeling of competence as a facilitator, and the consolidation phase was not intended to represent any type of evidence of validation. Hence, no conclusions may be drawn from responses during consolidation. Rather, we began these procedures not knowing what was necessary to assure that Kenny was paying attention to the story. We included the consolidation phase to give Kenny additional opportunities to hear questions similar to those that would be posed during the test phase and because he seemed more attentive when the experimenter acted as a facilitator.

During all test phases, there was no feed-back of any kind after each response (the transcripts of all sessions shown in Table 2 are literal accounts of everything stated by the experimenter [indicated in "lowercase"] and typed by Kenny with the assistance of a facilitator [INDICATED IN UPPER-CASE). As previously noted, third-party referees were included during Trials 2 and 3; this procedure offered further independent verification that the facilitator could not hear the initial presentation of the probe stories; we are, therefore, referring to her as an uninformed facilitator. Trials 1 and 3 were conducted in the same quiet classroom at

Kenny's school; Trial 2 was conducted at the home of Kenny's primary facilitator, who served as the uninformed facilitator during all test trials. All sessions were videotaped.

Results

Story Content

As shown in the column entitled "Test Responses" in Table 2, Kenny was highly accurate in his responses to questions during the first and third trials with the physical support of an uninformed facilitator. During Trial 1, there were three characters in the story, and each was named correctly, as was the game played, the location of the game, and events that took place during the game. Results from Trial 3 showed similarly high levels of precision.

Kenny named the characters in the story with one incorrect name ("BOB JIM" rather than *Tom* and Jim). All other responses were precisely accurate, including the object of desire in the story, how the object was procured, and the subsequent events.

Responses during Trial 2 were inaccurate, unclear, or incorrect to the questions posed. As shown in Table 2, Kenny indicated the character's age as "13" (the actual age in the story was 12). Similarly, he indicated the character in the story had "5DOLLARS" (the explicitly correct answer to the question was 20 dollars). However, in the probe story it is stated that "She managed to save up the fifteen dollars the ticket cost, plus another five dollars.. . She bought a ticket and told her mother she had only been able to save five dollars." Hence, this response was in part correct. The response to the question "What was the money for?" was incorrect (Kenny's response was "A PRESENT"; the correct response was to buy a concert ticket). The session was terminated after the following questions and statements were made through facilitated communication, "DOES SHELDON [referee l] REALLY BELIEVE... WHY DID HE MAKE HIS DAUGHTER GO WITH YOU.. DOES HE THINK WE CHEATED THE LAST TIME... I AM NERVOUS." Clearly, it is possible that these words came from the uninformed facilitator and not Kenny. However, in light of the previous validation experience with Kenny, as well as concerns for his apparent discomfort, the session was terminated.

To fully appreciate the accuracy of these responses, it is useful to recognize that the probability of "guessing" any correct answer (by the uninformed facilitator) is 1 divided by the number of possible responses (or 1/number of responses). Thus, to the question who was in the story, there could be literally hundreds of possible responses, with a corresponding probability of "1/hundreds." This is likewise the case with other questions such as "What game did they play?" (Trial 1) (e.g., Monopoly, Nintendo, football, chess) or to the question "Somebody wanted something real bad in the story. What did they want?" (Trial 3) (e.g., a girl friend, more money, an A on their report card, a new car). If we hypothetically assume that there could be 100 plausible answers to these questions, the a priori probability of "guessing" three correct answers is equal to 1/100 x 1/100 x 1/100 = $p < .000001$.

Precision of Key Strokes

It is noteworthy to point out the high level of precision that Kenny and his uninformed facilitator demonstrated during sessions. A measure of precision was calculated from those responses that were factually correct in Trials 1 and 3, as follows.

Factually Correct Statements: DADDDY, MA %TT,

JIMMMY, GBASEBALL, UINTHE HOUSE, THEY

BROKE A LAMP, MOcTHER, Tc@WO BROITHERS.

JIM, A BEBE GGUN, TRADED BAASEBALL CARDS,

SHOT IT IN TH=E HOUSE, BROKE A WINDOOW.

Factually Incorrect Statements: 13 (correct answer was 2), A PRESENT (correct answer was *a* concert ticket), BOB (correct answer was Tom }, and termination statement of Trial 2 (correct answer was a concert).

Partially Correct Statements: 5DOLLARS (complete answer was $15 plus $5).

Across these phases there were 14 incorrect key strokes out of a total of 149 (including the absence or presence of appropriate spaces between words), or a precision rate of 90.6%. Moreover, all errors were either from striking a key immediately adjacent to the correct key (accounting for S errors), the result of depressing the correct key too long, resulting in an additional letter (accounting for 5 errors), or the omission of a space between two words (accounting for I error). Hence, Kenny and his facilitator were not only precise in the answers that they offered but also in the accuracy of the spelling and typing of these answers.

Discussion

Kenny's performance during this study strongly indicated that he, not his uninformed

facilitator, was the source of answers to questions posed to him, at least during Trials 1 and 3. Moreover, Kenny was using at least simple inferential abilities to answer (discussed later), not a form of hyperlexia (Goldberg, 1987) or a learned motor response. He also demonstrated evidence of a phonemic transformation and a high level of precision in spelling out his answers, indicative of a phonological system of spelling. Also, some of the responses during testing with an uninformed facilitator implied logical inferences, conjectured extrapolations on a story, and an abstracted ordering in his memory of story elements. These responses are remarkable in light of his performance without the use of facilitated communication (i.e., a Stanford-Binet IQ of 31).

Evidence of Inference and Abstractions

As reported earlier, 13 of Kenny's responses were factually correct, 4 responses were factually incorrect, and one question was partially correct across all three of the sessions. The accuracy and consistency of these responses indicate that it is highly likely that Kenny, and not the uninformed facilitator, was the source of answers about the stories. Moreover, these responses appear to support the notion that Kenny has the ability to employ at least rudimentary inferential logic in answers to some of the questions. The questions posed to him were not directly taken from the transcripts of the stories. For example, nowhere in the story presentations was the question, "Who was in the story?" or "How did they get the thing they wanted in the story?" In order for Kenny to answer these questions, he had to make simple inferences about the questions. Thus, a "who" question inferred naming a character, and a "how" question inferred describing an action. Kenny's ability to inter answers to questions presented in a novel manner indicated that his responses were not rote due to repetition or some form of echolalic responding, akin to a savant hyperlexia (cf. Goldberg, 1987) nor a motor response in which he repeated back a learned sequence of key strokes. Kenny was primed during the consolidation phase of the story presentation with questions and responses similar but not identical to those heard during the test phase.

Three observations are worth noting. First, few of the questions were exactly the same during consolidation and test phases. Second, Kenny's responses varied to similar questions posed during the two phases. Comparison of questions and answers during the two phases (see Table 2) do not read as repetitive production. Indeed, responses during the consolidation phase were primarily characterized by seemingly random or missed key strokes that could have been related, at least in part, to the limited competence of the experimenter/facilitator (the first author) during this presentation. Third, Kenny's responses during the test phase could not be explained as a repetition of a previously learned motor program. The literal stroke-by-stroke transcripts during the two phases bear little or no resemblance to one another, indicating that Kenny did not simply "play back" a previously memorized message. Indeed, the best explanation of these data is that Kenny's correct responses to questions exemplified at least rudimentary linguistic inferences.

This type of simple inference is not the only evidence of his abstract information-processing abilities. For example, during Trial 3, Kenny demonstrated a phonemic transformation. He had previously been presented with the spelling "B-B" [gun] by the experimenter during the initial story presentation, but later spelled the word as "BABE" during the test phase. Though this was an isolated example, it suggests that Kenny had the ability to produce a phonemic transformation analogous to "sounding out" the word and indicates that at some level he may be using a phonological system to spell. Further analysis of Kenny's responses during the test phases, including "DADDY FORGAVE THEM" (Trial 1) and "MOTHER WAS MAD" (Trial 3), implies that Kenny may be able to logically infer information from the events of the stories. Although it is possible that the uninformed facilitator could have inferred these responses, as opposed to being authentic responses from Kenny, this seems unlikely. These inferential statements were consistent with facts in the story that were not in any way revealed during prior questions and, therefore, the needed information was not available to the facilitator for her to "guess." In Trial 1 for example, the character Matt took the blame for the broken lamp because he feared that his friend Jimmy would not otherwise be allowed to return to their house. One plausible inference from this information (presented to Kenny, but not to the uninformed facilitator) was that Matt's father might be more forgiving if Matt assumed responsibility. During earlier questioning in the test phase of Trial 3, there was no indication that the brothers' parents had refused to allow the boys to have the B-B gun, which supported the inference that "mother was mad" (as opposed to mother being "forgiving")

The indication that Kenny was using higher order processing of the stories, as well as the authenticity of these statements as his, gains further support from his demonstration of a conjectured extrapolation of the story during Trial 1. The story presented to Kenny included the statement, "It was raining by the time they got there, so they had to play indoors" (see Table 2). The last question presented to Kenny during the test

phase was "What happened at the end of the story . . . What was the last thing that happened?" His response was "DADDY FORGAVE THEM IT STTOPPED RAAIINING." Review of the questions and answers during this test phase shows that there had been no prior mention of rain with the uninformed facilitator. Discussion of "RAAIINING" indicated both that this statement was authored by Kenny, not the facilitator, and that he was extrapolating on the facts of the story, a fundamentally abstract processing of information.

Kenny also showed memory retrieval consistent with the well-studied information-processing phenomena of primacy-recency effects (Ebbinghaus, 1885, as cited in Rose, 1992). When Kenny was asked "Who was in the story

Who else?" he responded with the last characters mentioned in the story as his first response (e.g., In Trial 1, the order of presentation of characters was Matt, Jimmy, and Dad. Kenny's response to who was in the story was "DADDY, MA%TT, JIMMMY). He did *not* follow an order consistent with a rote or programmed response. Rather, he abstracted the order of the characters in the story in a manner consistent with a primacy-recency effect.

Procedural Considerations

It is tempting to offer conjecture about why this procedure or these individuals were able to reveal valid communication with facilitated communication. However, we find it far too premature to draw any such conclusions. Rather, we have chosen to highlight for consideration a small number of factors that may have been relevant. First, there were several conversations among family and professional staff members working with Kenny regarding validation from the outset. Kenny was in a climate in which significant others encouraged validation from his earliest use of facilitated communication. Experimentally controlled validation was a priority throughout.

Second, as indicated previously, Kenny and his facilitator had been working together for approximately 30 hours a week for *15* months prior to the first experimental session. During this time Kenny was involved in a regular education curricula in which he reportedly took the typical numerous tests given to 6th and 7th graders. The facilitator related that she often was facilitating Kenny with examination materials that were unfamiliar to her. It may be that these incidental situations offered repeated practice opportunities for pseudo-validation testing.

Third, and related to repeated practice, prior to the current protocol, we set up a number of preliminary opportunities for Kenny to pass information between home and school that were initially unsuccessful. However, Kenny began showing valid, though anecdotal, evidence of information passing with repeated opportunities (see Weiss & Wagner, in press, for an expanded account of the events leading up to these validation procedures). No conclusions were drawn from a single testing. Rather, repeating test sessions was emphasized, and no apparent pressure was brought to bear in any one session. Practice with the information-passing strategy may be necessary, a conclusion that is supported by Cardinal et al. (1996).

Fourth, Kenny was always required to look at the keyboard whenever using facilitated communication. When he would look away, the facilitator stopped offering the physical support as a natural consequence and redirected Kenny's attention back to the keyboard. By the time we were conducting this protocol, Kenny rarely would look away from the keyboard while being facilitated.

Fifth, the test probe information relied on stories with several names, places, and events. Hence, there was a wider scope of answers that could be rendered indicative of valid responding, without a requirement for any one particular answer. Moreover, there were story lines to follow rather than a series of disconnected and individual target responses.

Sixth, no distractor conditions were employed in which the facilitator and Kenny were receiving differing information, common in other procedures (cf. Green & Shane, in press).

The reason that we avoided a distractor-type procedure was that it would be dissimilar from the common use of facilitated communication. We believed it prudent and necessary to not tamper with the phenomenon as it was reported to exist; at least, not yet. Rather, we felt it necessary to begin with a protocol that allowed for a typical interaction between Kenny and the facilitator, with modifications such as distractor conditions to follow later.

Seventh, once we had our first successful practice session in which Kenny passed a small amount of accurate information (7 months prior to the current protocol), we changed very few factors. Given that we did not know what the important features of the protocol would eventually be, we took the prudent measures of "staying with what worked" and were very slow to proceed with any methodological changes. During that time we had begun employing the consolidation phase used in the current protocol and had the experimenter remaining in the room presenting questions during the test phase. We decided not to change those strategies in the name of staying with a protocol that seemed successful, particularly given that we could guarantee that the facilitator could be kept uninformed of the probe information and that the possibility of cuing between the experimenter and the facilitator could be eliminated by having the experimenter always standing behind and out of view of Kenny and the facilitator with no verbal feedback.

A glaring inconsistency from our caution in changing too many variables occurred during the second session of the current protocol. We conducted that session at the home of the facilitator rather than at Kenny's school because we were not able to gain admittance into the school at a time that we could all be present. Whether or not that influenced the outcome, we do not know. However, it reminded us to change as few variables at one time as possible. Our future replications, specifically with Kenny, will likely include staying in one location, modify mg or eliminating the consolidation phase, and having separate experimenters present the initial story and test questions.

Finally, we used only one facilitator during the test phases. Indeed, we were only interested in studying the team of Kenny and his facilitator in that we did not want to introduce uncontrolled error variance that may be associated with multiple facilitators. As our database of validated sessions grows, we plan to both test Kenny with a new facilitator and Kenny's current facilitator with other individuals alleged to use facilitated communication.

Kenny's experience during this study strongly implied that he is at least one individual with whom facilitated communication appears to be a valid method of communication. However, the extent to which these data generalize either to other instances of Kenny's communication or to other individuals with disabilities requires further study. That facilitated communication *can* exist does not imply that it is always operative. Witness the fact that during Trial 2, Kenny did not show valid communication. Therefore, had Trial 2 been the only trial administered, we would have concluded that facilitated communication was not a valid form of communication. Results from this study demonstrate that facilitated communication *can* be a valid form of communication, but it remains unclear which variables are necessary for the phenomenon to appear. Although this is not the only reported case of some form of validated communication using facilitated

communication (Calculator & Singer, 1992; Cardinal et al., 1996; Crossley, 1992; Heckler, 1994; Intellectual Disabilities Review Panel, 1989; Karp, 1993; Karp et al. 1993; Queensland Report on Facilitated Communication, 1993; Rimland & Green, 1993; Sheehan, 1993; Sheehan & Matuozzi, 1994; Vasquez, 1994), the number of carefully documented case reports remains small. However, contrary to the widely held opinion that there is *no* valid support (cf. Jacobson et. al., 1995), it is reasonable to conclude from the data already available that the phenomenon of facilitated communication does exist in some fashion with as yet unspecified incidence, validity, or reliability. Further exploration of the facilitated communication phenomenon, including in-depth studies of each reported case, as well as close scrutiny of the facilitators who participated in validated cases, is paramount to our further understanding of this technique and the neurologic impairments of those who use it with apparent success.

TABLES:

Table 1

Kenny's Age Equivalent Scores (in Months) on the Vineland Adaptive Behavior Scales by Testing Time

Subscale	*Time 1*[a]	*Time 2b*	*Time 3c*
Communication	18	27	26
Daily Living Skills	25	26	30
Socialization	8	26	27
Motor Skills	23	-d	-d

a: CA=10.0 years .

b: CA = 11.33 years

c: CA = 15.75 years.

d: Not scored.

TABLE 2: Probe Stories, Questions, and Responses During Consolidation and Test Phases. by Test Session

Trial/Probe Story [a]	**Consolidation "questions" and**	**Test "questions"**

	RESPONSES [b]	and RESPONSES[c]
Trial 1:[d] There was boy named Matt and his friend Jimmy. The boys were going to play together at Matt's house. It was raining by the time they got there, so they had to play indoors. Jimmy wanted to play baseball, but Matt told him his father would be upset if they played ball in the house. They might break something Matt said. But Jimmy convinced Matt to play ball for a little while, and sure enough one time Jimmy threw the ball too hard and broke a lamp. Well, Matt's dad heard the crash and came running. And, he was mad!! Who broke the lamp? But, before Jimmy had a chance to answer, Matt said, 'Sorry dad it was my fault'. Matt's dad told Jimmy to go home. so the boys couldn't play together that day. But, Matt knew his dad would have never let Jimmy come over again if he knew that Jimmy broke the lamp.	**Trial 1:** "Who were the two boys in the story? MAOTT "Who else?" JIMMYY "What game did they play?" FBASEFBAKIOOLLT "What happened while they were playing baseball?" THEY BBRUOKDEE THE , LLAMP "What happened after the lamp broke?" MNASATTTTTTS DEEEDAED GGORFTGB MADC "And then what?" HE SXEDCN TGB U JNJJIKMMMYHB HHOOM 3EDC	**Trial 1:** "Who was in the story?" DADDOY "Who else?" MA%TT JIMMY "What game did they play in the story?" GBASEBALL "Where did they play baseball?" UINTHE HOUSE "What happened while they were playing the game that they were playing?" THEY BROKE A LAMP "What happened at the end of the story... what was the last thing that happened?" DADDY FORGAVE THEM IT STTOPPED RAAIINING
Trial 2:[e] Judy was a twelve year old girl. Her mother promised her that she could go	**Trial 2:** "What was the name of the girl in the	**Trial 2:** "How old was the person in the

to a special rock concert coming to their town if she saved up from babysitting and lunch money to buy a ticket to the concert. She managed to save up the fifteen dollars the ticket cost, plus another five dollars But, then her mother changed her mind and told Judy she had to spend the money on new clothes for school. Judy was disappointed and decided to go the concert anyway. She bought a ticket and told her mother she had only been able to save five dollars. That Saturday she went to the performance and told her mother that she was spending the day with a friend. A week passed without her mother finding out. Judy then told her older sister Louise that she had gone to the performance and had lied to her mother about it. Should Louise tell her mother what Judy did?	story?" JUDY "How old was she?" TWELVE "How much money did she need to earn? FYIFTEEBN "What did she want to do with the money?" CUOICER6TR "How much money had she saved?" TWEHHNTY "Did she get to do what she wanted?" YESGO TIO TTYHE CONXZCERT "Who else was in the sotry?" LOUISE COULDNTTELL ABOUT THE CONCS3ERT	story?" 13 "How much money did the person in the story have?" 5DOLLARS "What was the money for?" A PRESENT "Where did the person in the story want to go? 4DOES SHELDON REALLY VBELIEVEWHY DID HE MAKE HIS DAFUGHTER GOWITH YOUDOES HDE THOINK WE CHEATEDTHE LASTIME I AM NERVOIUS
Trial 3:[g] Jim and Tom are brothers. Jim wanted a B-B gun, but his parents said, "Absolutely no, B-B guns are dangerous." Jim did not listen to his parents. One day after school Jim traded his baseball card collection for his best friend's B-B gun. Jim snuck the gun home and showed it to his brother. While the two brothers were playing with the gun, Tom accidently pulled the trigger and broke the window. The boys' mother heard the noise and went into the	**Trial 3:** "Who was In the story?" TKM "And who else?" JIJJMOLTGH3ER What did Jim want to buy?" JIM WANTEDBBBGUN	**Trial 3:** "Who was in the story?" MOcTHER "Who else?" T~OWO BROITHERS "What are their

boys' room. Should Tom tell on his brother for buying the gun?	How did he get the B-B gun...how did he get what he wanted to get?" TEADED6HEBSEBAL SCARDS "What happened after he traded the baseball cards... where did they go with it?" SHCOTASS HONNJSHOMMSE "What happened when they went home...when Jim brought the B-B gun home, who did he show it to? BRO6TTHE4R TOM "What happened when he showed his brother Tom the B-Bgun?" POUKLEEDDTHNER6TGBTRIER VEEOL, KETHEWIINDCOLW	names?" BOB JIM "Somebody wanted something real bad in in the story. What did they want? A BEBE GGUN "How did they get the thing they wanted in in the story?" TRADED BAASEBALL CARDS "Let's for a moment assume that the kid wanted a B-B gun and traded baseball cards for it. What did they do with the B-B gun?" SHOT IT IN THE#E HOUSE "What happened when they shot the B-B gun in the house, then "What happened when he pulled the trigger? BROKE A WINDOOW MOTHER WAS MAD

NOTE: The above transcripts are literal accounts of *everything stated aloud* by the experimenter (indicated in lowercase) and typed by Kenny with the assistance of a facilitator (INDICATED IN UPPERCASE). No

a: presented by experimenter. b: Facilitated by experimenter. c: Facilitated by uninformed facilitator. d: May 1993. e:June 1993. f: November 1993.

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