Sign Talk Development Project

FINAL REPORT

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INTRODUCTION:

The Sign Talk Development Project was a 30 month project funded by the Child Care Initiatives Fund, Health and Welfare Canada to study the bilingual and bicultural development of children attending Sign Talk Children's Centre. The project had four objectives:

- To assess the children's spoken English language skills.
- To observe, record, and analyze the children's acquisition of American Sign Language (ASL).
- To train staff to implement bilingual and bicultural programming based on assessment data collected by the Sign Talk Development Project.
- To prepare a manual of guidelines and materials for implementing a bilingual and bicultural program with Deaf and hearing individuals.

Three staff were hired to implement the project, an English Specialist, an ASL Specialist, and an Office Manager. The project also involved consultants to perform specific tasks, including an American Sign Language Consultant, a Publishing Consultant, a Children's Stories Coordinator, and a Translation Consultant. The project was evaluated by a team of three external evaluators.

This final report outlines the tasks and activities performed by the Sign Talk Development Project Team. It is organized in four sections: 1) Background information; 2) Project Goals including a) language assessment, b) bilingual and bicultural programming, c) preparation of the manual; 3) Professional Development and Training, and 4) Recommendations and Conclusion.

It is the STDP Project Team's hope that the information contained in this final report will provide a little more understanding to the complex challenges of creating an environment which fosters children's development as bilingual and bicultural individuals.

1. BACKGROUND INFORMATION:

Sign Talk Children's Centre (STCC) is a daycare centre that was built on a dream. The seed for that dream was planted at a Deaf Culture and Pride workshop held in Winnipeg in April 1985. At that workshop, Deaf parents expressed the need for a specialized daycare that would meet the needs of their Deaf and hearing children. These parents expressed their frustration and concern about sending their children to daycares that knew little or nothing about the Deaf community's language, American Sign Language (ASL), and culture. Deaf parents were also concerned that they would not be able to communicate with daycare staff in their native language, ASL. As well, parents were looking for a daycare that would promote the positive learning of both their language and culture; traditionally, hearing children of Deaf parents have been influenced by society's perception of Deaf people as "disabled" and their language as incomplete. Deaf parents wanted to have the emerging acceptance of the Deaf community as a linguistic and cultural minority reflected in the their children's daycare program.

After investigating a number of options, members of the Deaf community determined that its best course of action would be opening an independent centre that would serve its parents and children. A steering committee was formed, with both hearing and Deaf members, and in April, 1986 the Ministry of Community Services identified STCC as high priority and allocated funds for twenty spaces. After numerous consultations with community-based organizations and government departments, a parent Board was formed in February 1987 and in November 1987 STCC was opened.

Sign Talk Children's Centre was established by Deaf parents who wanted a daycare centre that was culturally and linguistically sensitive to them and their children. STCC was developed to strengthen and meet the needs of its families in a number of ways:
- encouraging the child's communication skills in both ASL and English;
- encouraging the child to develop a sense of pride in both Deaf and Hearing cultures;
- enabling parents to communicate comfortably with the child's caregivers;
- enhancing the child's linguistic competence and positive self-identity in preparation for school and living within two cultures;
- encouraging social acceptance of both Deaf and Hearing people as equals and thus "normalizing" both Deaf and Hearing cultures.
- offering parents the possibility of building support systems with other parents and/or exploring learning opportunities related to family issues.

For the Winnipeg Deaf community, the need for a bilingual and bicultural daycare was, and continues to be, based on the simple realities faced by all families. Most Deaf parents have

children who possess normal hearing; these children are likely to grow up in a home environment that uses American Sign Language but still need to acquire spoken English skills for socialization and future school placements. STCC's goal was to provide Deaf and hearing children with a daycare experience that included support for both languages, English and ASL, and provide children with access to positive Deaf and hearing role models. The entire concept of STCC involves hearing and Deaf people working together - there are hearing and Deaf children, hearing and Deaf parents and hearing and Deaf staff.

From the beginning, the Winnipeg Deaf community has been STCC's most valuable resource. Like any daycare, STCC operates according to regulations determined by the Provincial Day Care Office. But STCC is also considered an integral part of the Winnipeg Deaf community, and the STCC community can be seen as a subset of the larger Winnipeg Deaf community. In this way, STCC can look quite different from other daycares because it operates as an organization that is responsible to the Deaf community as a whole, not only to its parents. Board members, parents, and staff often balance two roles: their roles as members of the STCC organization and as members of the Deaf community. Often standard organizational procedures (ie. recruitment of staff) are modified or even replaced by processes that are considered more culturally appropriate for the Deaf community. In that respect, STCC truly strives to be a bilingual and bicultural centre, not only in its programming, but also in its organizational structure and procedures. The advantages to STCC for being considered a "community daycare" are the support and guidance it receives and the knowledge that the community will provide input should the Centre stray from its stated goals.

Based on a dream that a daycare could be established to meet its needs, the Winnipeg Deaf community created a specialized Centre with highly specialized staff requirements. Meeting those requirements became problematic. An evaluation of STCC, conducted in June of 1989 through to January 1990 indicated that the major limitation in meeting the needs of STCC's children and families was hiring personnel with the skills required to work at STCC. The Centre had always been able to attract skilled Deaf and hearing individuals. But its Deaf staff did not have access to traditional training in the area of child care. And, although possessing post-secondary training in child care, hearing staff often did not have adequate ASL skills and knowledge of Deaf culture. Complicating this dilemma was the fact that both groups of staff members did not have access to formal training that would specifically address their needs. In part, this lack of formal training could be directly attributed to the fact that hearing children of Deaf parents (who make up the majority in STCC) were a group whose language acquisition and development was not well documented. And although there was more research in the area of Deaf children of Deaf parents and their acquisition of ASL, it was extremely difficult to determine whether or not a Deaf preschooler was exhibiting age-appropriate language use because of a dearth of ASL language assessments. In order to train daycare workers, both hearing and Deaf, to provide appropriate language acquisition opportunities, more needed to be documented about STCC's children and how they acquired ASL or, if possible, spoken English. The evaluation further identified the need for increased materials and resources for teaching ASL and Deaf culture to preschool children. At that time, materials such as these were either non-existent or not available anywhere in Canada or the United States. After identifying these deficits, the evaluation recommended that STCC

pursue funding for a development project that could provide added resources to the Centre's staff and program.

SIGN TALK DEVELOPMENT PROJECT

A committee was established to produce a proposal for funding of a development project that could be attached to the Centre. After a number of revisions, a proposal requesting funding for what was then known as the Sign Talk Development Project was submitted to the Child Care Initiatives Fund, Health and Welfare Canada, in 1989 and was approved in July 1991. The proposal outlined a 30 month project that was to focus on four goals involving the use of both English and ASL in STCC.

The four goals of the project were:

1. To assess the children's spoken English language skills.
2. To observe, record, and analyze children's acquisition of ASL.
3. To teach the staff and parents how to facilitate the children's bilingual and bicultural development.
4. To publish a manual of bilingual and bicultural guidelines for a daycare program.

The Winnipeg Deaf community had some experience with the development of pilot projects, most notably the Deaf Human Service Worker Training Program and the Deaf Literacy Program. These projects had, through trial and error, developed a number of processes that were applied to the Sign Talk Development Project. Following the model established by these projects, an Advisory Committee, consisting of Board members, parents, Deaf community representatives, and persons with daycare experience, was struck in the fall of 1991 to oversee the initial development of the project. As its first task, the committee began advertising for three STDP positions: an American Sign Language Specialist, an English Language Specialist and an Office Manager.

From the outset, the Advisory Committee searched for individuals who had the prerequisite skills, had experience working in a bilingual and bicultural environment, and were themselves bilingual ASL/English users and bicultural. As well, the search process placed emphasis on recruiting and hiring individuals who could work as a team. The search process was national in scope and it made extensive use of information systems used in the Canadian Deaf community; for example, the job advertisements were regularly posted, through electronic mail, on the Disabled

Information Services Network of Canada[1].

The Office Manager and the English Language Specialist were hired; however, a suitable American Sign Language Specialist was not found and the position was once again posted. Despite posting this position a second time, an appropriate candidate was still not found so the position was re-advertised with a training component added. In essence, the position was restructured to enable a competent Deaf individual to learn the skills of language assessment required to perform the job. The difficulty finding a Deaf candidate can be attributed to two things: a) there are limited opportunities for Deaf individuals to pursue post-secondary training in this area, and as a result, b) there is an extreme shortage of Deaf individuals with academic training in the area of language development and assessment. Once the training component was added to the American Sign Language Specialist position, a suitable Deaf candidate was hired and STDP was formally started in March of 1992.

The Sign Talk Development Project Team members were:

Charlotte Evans	Project Manager/English Language Specialist
Kyra Zimmer	ASL Specialist
Denise Murray	Office Manager

EXTERNAL PROJECT PERSONNEL

The STDP Project also used a number of consultants to assist with the evaluation of the project, the training of the ASL Specialist, the translation of reports, and the publishing of project materials.

The Evaluation Team

The STDP hired an Evaluation Team to provide both summative and formative evaluation and to work closely with the Project Team. The evaluators were chosen for their expertise and their sensitivity to the goals and values of the Winnipeg Deaf Community. The Evaluation Team consisted of Dr. Michael Rodda, Edmonton, Alberta; Dr. Carol Erting, Washington, D.C.; and Rita Bomak, Winnipeg, Manitoba.

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[1]On the surface, using the Disabled Information Services Network might appear to be a logical secondary source for advertising positions, but in fact it is more likely to be the primary source. More positions in the Deaf community are filled through advertisements on the Disabled Information Services Network or through advertisements sent directly to agencies or Deaf clubs than through the classified section of the *Globe and Mail*.

The evaluation team was formed to provide ongoing support, training and guidance to the STDP Team. The Evaluation Team was primarily concerned with providing technical support to the research components of the project, but they also evaluated the project's success within Sign Talk Children's Centre and the Deaf community.

ASL Consultant

As mentioned earlier, a training component was added to the position of ASL Specialist. Although basic training in the areas of linguistics, language acquisition, and language development could be provided by the English Specialist, it was felt that an ASL Consultant needed to be contracted to provide the ASL Specialist training in the areas of ASL acquisition, assessment and analysis. This topic is fully described in the section "Evaluation, Professional Development and Training".

Publishing Consultant

A publishing consultant was contracted to assist with the development of the final report and the manual. Greg Evans was chosen as the Publishing Consultant and he worked closely with the STDP Team developing the final report and the manual.

Children's Stories Coordinator

David Burke was contracted to coordinate the filming of local Deaf adults telling children's stories. As the Children's Stories Coordinator, he developed a videotape of professional quality to be used with young children.

Translation Consultant

Rick Zimmer has hired to provide assistance with developing the American Sign Language version of the final report. He worked primarily with the ASL Specialist on this task.

ORGANIZATIONAL STRUCTURE:

Once STCC received news that funding had been approved for the STDP, an Advisory Committee was established to oversee the project. The Advisory Committee was established for two reasons: 1) STCC had a volunteer Board of Directors that was concurrently trying to find a new home for the Centre and was not confident they could adequately provide direct supervision of the project and 2) it was felt that having the Director supervise the project was not a feasible option. The Advisory Committee, therefore, was intended to operate as "managers" of the project. The committee was comprised of Board members, parents, the STCC Director, daycare professionals and representatives of the Deaf community.

Figure 1 STCC/STDP Organizational Chart

Initially, the Advisory Committee was responsible for the recruitment and hiring of staff, project finances, the overall management of the project, and liaising between the Project Team and the STCC Board of Directors. The original organizational structure had the STDP Team reporting directly to the STDP Advisory Committee, which in turn reported to the Board of Directors. The STCC Director and the STDP Team were to meet on a regular basis to facilitate the project's integration into the Centre's day to day operations. This structure is illustrated in Figure 1.
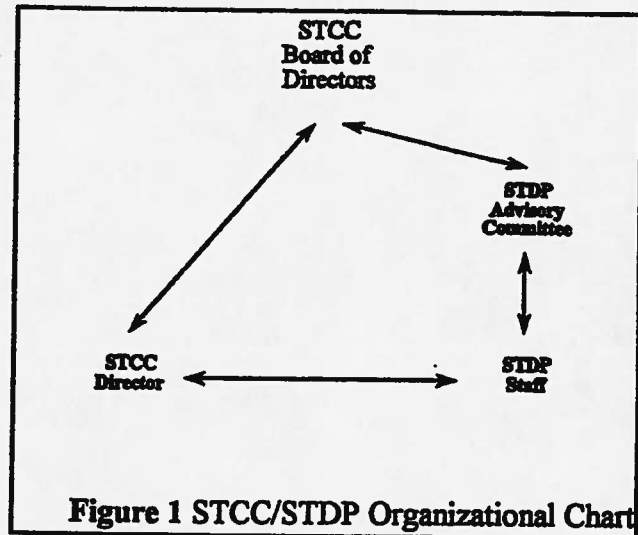
This organizational structure proved to be cumbersome for a number of reasons. The Advisory Committee, while acting as managers for the project, did not have the authority to make financial and personnel decisions and these decisions needed to be referred back to STCC committees and ultimately back to the Board of Directors. As well, there was no clear line of supervision within the Project Team.

After a period of time, it was decided to abandon the Advisory Committee and have the STDP Team report their activities directly to the Board of Directors. STDP would then have a regular time to report to the Board of
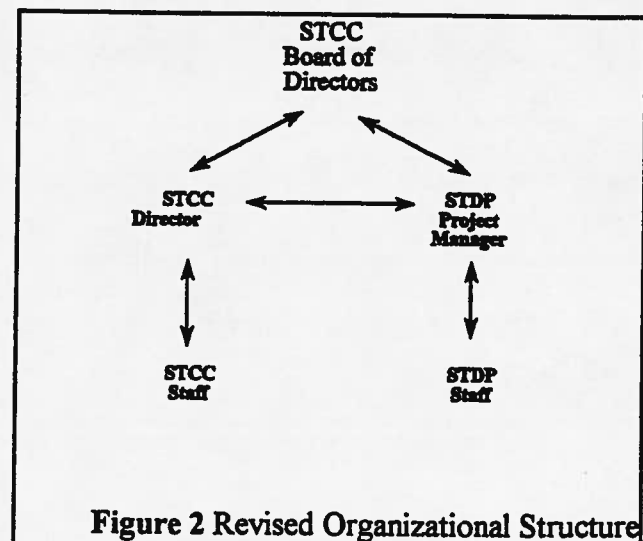

Figure 2 Revised Organizational Structure

Directors at their monthly meetings. As well, finance matters were reported directly to the STCC Finance Committee, the Office Manager would become a member of this committee, and personnel matters to the STCC Human Resource Committee. Another change instituted at this time was to have the STCC Director meet with the STDP Project Manager, instead of meeting with the entire STDP Project Team. This revised organizational structure is illustrated in Figure 2.

The Project Manager of the STDP became the contact person for the STCC Director and other external organizations, but decisions related to the project goals continued to be made as a team involving all three STDP Team members.

2. PROJECT GOALS

LANGUAGE ASSESSMENT

The Sign Talk Development Project proposal identified two needs that existed among the children enrolled in Sign Talk Children Centre:

1. *Each child needs age-appropriate language skills, and therefore there is a need to identify children with delays in spoken English language development,* and

2. *The need to accurately measure the level of the child's functioning in ASL and understand the sequence of ASL development is evident.*

Two goals were established for the project that would attempt to address these needs: 1) assess the children's spoken English language skills and 2) observe, record, and analyze children's acquisition of American Sign Language (ASL).

A)   PROCEDURE FOR COLLECTION OF LANGUAGE SAMPLES

The process for assessing the children's language skills involved collecting videotaped samples of each child interacting with a variety of people (daycare staff, peers, parents, siblings, language specialists). These videotapes were then analyzed to monitor the child's skills in both English and ASL.

Samples were collected at approximately six month intervals, for a total of five sessions over the two year period from May, 1992 to April, 1994. The activities, settings, and people involved in these samples varied between each session. The reason for this variation was to elicit samples of the children's language in as many different settings and with as many different interactants as possible within limited time constraints; not all settings and interactants could be videotaped every six months for all 20-25 children. The following provides a description of each of the five sampling sessions.

Sample #1:   (Spring 1992)

The first sample of English videotapes was collected during the week of April 27 - May 1, 1992, involving samples of 18 hearing children interacting with the English Language Specialist for approximately 30 minutes. Samples included the administration of a brief formal screening test (The Communication Screen, Striffler and Willig) and free play activities with toys (picture books, toy house and people, and a tea party set).

The first sample of ASL videotapes was collected in a similar manner during the week of May 4 - 8, 1992. This involved samples of 18 hearing children and 5 deaf children interacting with the ASL Specialist for approximately 30 minutes. The Communication Screen was attempted in ASL followed by the free play activities. (The Specialists discovered that, because of the inherent differences between ASL and English, translating an English screening instrument into ASL often changed the focus of both the stimulus and the response.)

Sample #2: (Fall 1992)

This set of videotaped samples included each of the 21 children (6 Deaf, 15 hearing) in three different environments; 1) in the Centre, 2) at home, and 3) in a private room with each of the Language Specialists. All three of these situations were videotaped during a two week period. The samples were not clearly ASL or English samples, but indicated the language which the child naturally used in each of the situations. Meetings were held with staff and parents prior to the videotaping to determine the most appropriate activities and times for collecting the samples. All of the families, with one exception, were willing to have the researchers videotape them in their homes. For the one exception, a sample was collected with the parents using the Centre as a substitute for their home. Videotaping began on September 21, 1992 and was completed on December 10, 1992.

The Language Specialists found it very helpful to collect samples in the children's homes. This provided a more complete picture of the children's language skills and the family's communication patterns, particularly with younger children who tended to be more expressive with their parents than with the Specialists.

The activities videotaped in each of the samples included: a) a natural interaction in the home involving eating a meal, playing with siblings, and reading a story or playing a game with parents (mother/father); b) interaction at STCC involving the child eating lunch, participating in a group or structured activity, and playing in an unstructured activity; and c) interaction with the Language Specialists describing pictures and re-telling a movie.

Sample #3: (Spring 1993)

Each of the hearing children were videotaped interacting with a hearing STCC staff member for approximately 10 - 15 minutes. The focus of this interaction was reading a book or telling a story. The children were then videotaped interacting with a hearing peer playing with a tea party set. The samples of the 17 hearing children were collected during the last two weeks of May 1993.

The 17 hearing children were videotaped interacting with a Deaf STCC staff member reading a book or telling a story. The 4 and 5 year old children also watched a cartoon and re-told the story to the Deaf STCC staff member. The 6 Deaf children were videotaped interacting with a Deaf STCC staff member for approximately 10 - 15 minutes and then were videotaped while

playing with a Deaf peer.   These samples were taped from May 18 - 31, 1993.

Sample #4:   (Fall 1993)

This sample included: 1) one-to-one interaction with a hearing STCC staff member in spoken English (hearing children only); 2) one-to-one interaction with a Deaf STCC staff member in ASL (all children); 3) interaction within a group activity (all children); 4) one-to-one interaction with the ASL Specialist re-telling a videotaped story in ASL (hearing and Deaf 4 and 5 year old children only); and 5) interaction with family members in their home (all children).

The videotaping of children occurred during October and November 1993.   A total of 20 children (15 hearing; 5 Deaf) were videotaped both at STCC and in their homes.

Sample #5:   (January - April 1994)

A total of 25 children (17 hearing; 8 Deaf) were videotaped in the following situations for this sample: 1) one-to-one interaction with the English Specialist in spoken English (hearing children only), 2) one-to-one interaction with the ASL Specialist in ASL (all children), and 3) a 30 minute sample of each child interacting with peers and staff in the Centre. The interaction with the Language Specialists included a picture description task, telling a familiar story (with book if necessary), and watching a short cartoon and then re-telling it. For younger children (2 years old), the cartoon was replaced with playing with a toy house and people. The activities included in the Centre samples varied among the children but included free play, circle time, art activities, and snack.

B)   ENGLISH ASSESSMENT RESULTS

Assessment Procedure:

At the completion of each sample collection, the English Specialist transcribed and analyzed the English portions of the videotapes according to the Language Sampling, Analysis and Training technique (Tyack and Gottsleben).   If necessary, further assessments (vocabulary development, phonological development, and pragmatic skills) were then conducted by the English Specialist to determine specific delays/disorders based on the results of the initial analyses.   The results of these assessments were documented and presented to parents and STCC Staff.

Results:

The results of the English assessments grouped the children into the following five categories:

Age-appropriate -   This category includes children who are developing English language skills in a similar manner and rate as other children their age.   This category also includes children who are emerging from the pre-language stage in what is considered a normal fashion.   It also includes children who could be considered on the "borderline" between normal and delayed development.

Speech Problem -   This category includes children who experience difficulty producing speech sounds or using simplified speech patterns beyond an appropriate age. These children do not have difficulty expressing their ideas in grammatically correct sentences, but, due to mispronunciation, they may be difficult to understand.

Voice Problem -   This category includes children who exhibited some kind of voice problem, including hoarse and breathy voice quality related to vocal abuse (prolonged shouting, speaking loudly, or making "sound effects" - car motor, animal noises, crashing sounds).

Language Delay -   This category includes all the children demonstrating English language skills at a level below their age.

Second Language -   This category includes children who had established a strong language base in ASL and were learning English as their second language. Their language errors were intrusion errors; their English production demonstrated patterns which were influenced by their knowledge of ASL.

The number of children falling into each category from each of the five assessment sessions is summarized in the following table titled, "English Assessment Results".   It is important to note that the variation in the total number of children assessed in each session is a result of changing enrollment at STCC; as children grew older they left the daycare to begin school, and new younger children began to attend STCC.

ENGLISH ASSESSMENT RESULTS

PATTERN	SPRING '92	FALL '92	SPRING '93	FALL '93	JAN - APR '94
Age-Appropriate	11	11	9	9	10
Speech Problem	2	1	1	0	0
Voice Problem	2	1	1	0	0
Language Delay	3	2	4	3	3
Second Language	0	0	2	3	4
TOTAL	18	15	17	15	17

Discussion:

The majority of hearing children attending STCC demonstrated age-appropriate English language skills in each of the assessment samples between 1992 and 1994. The children developing English age-appropriately included children with hearing parents and children with Deaf parents. A few children were identified as having a speech problem or not producing speech sounds clearly. It is often a concern that the hearing children of Deaf parents will develop speech problems from limited exposure to clear speech models; however, two of the three children diagnosed with speech problems were children with hearing parents. The incidence of speech problems in the children attending STCC appeared to be similar to that of the general population. A relationship did appear to exist between the incidence of voice problems in children and the hearing status of parents; both the children noted to have hoarse, breathy voice qualities had parents who were hard of hearing. These children habitually spoke loudly to facilitate communication with their hard of hearing mothers. Alternatively, there did not appear to be a

relationship between a parent's hearing status and the incidence of language delays or disorders in children. Children identified as having a delay in their development of English language skills also had difficulty expressing themselves in ASL. For this group of children, their language delay was attributable to a pervasive developmental delay or social-emotional factors.

It was necessary to include the category of "Second Language" in order to distinguish the children with an overall delay in their language development from the children who had established a solid language base in ASL and were learning English as a second language. It must be noted that this category did not include all the hearing children with Deaf parents; most of the hearing children with Deaf parents were acquiring both languages age appropriately. The limited sample size does not allow for conclusive statements, but the hearing children with Deaf parents who were categorized as "Second Language" were all only or first-born children, which indicates that their exposure to spoken English through siblings was limited.

Several consistent patterns were noted in the English skills of the children in the "Second Language" category which indicated an influence from their knowledge of ASL grammar. At the lexical level, words were used that were related in meaning, but from a different grammatical category, for example, "froze" for "cold", or "nothing" for "no". More specifically, nouns were frequently replaced with verbs, for example, "sit" for "chair", or "sleep" for "bed". This pattern is consistent with young children's ASL use; although these nouns and verbs are differentiated by adults, they are often not clearly defined by children. At the morphological level, auxiliary and copula verbs, as well as verb tense markers were frequently omitted. These concepts are indicated through facial expression and sign movement in ASL. Plurals were often indicated by repeating the word, as they are marked in ASL. A distinction was often not made between male and female pronouns - all persons were referred to as "he" or "his". This was considered to be influenced by the neutral indexing for indicating pronouns in ASL. Word order errors were also noted which reflected an influence from ASL. Adjectives followed rather than preceded nouns, "Horse go barn red"; sentences were "bracketed" (beginning and ending with the same word), "Maybe girl can eat it, maybe"; and verbs occurred at the end of sentences, "You and me outside go". At the syntactic level, clauses were combined without using the appropriate syntactic markers, but by using pauses, pointing or facial expression to indicate the connection between the ideas.

The important difference between the children who are learning English as a second language and those with an overall language delay is that the grammatical structures are not absent, but the children are marking them in ways inappropriate for English. For this reason, intervention with this group of children is very successful; they require exposure to the English rules so they can replace the rules they have been applying from ASL.

SUMMARY:

The incidence of either language delay or language disorder has decreased significantly since the first language assessments of the children in STCC were conducted in 1988, several years before the Sign Talk Development Project was initiated. The primary reason for this decrease appears to be that Deaf parents are aware of the importance of providing their children with clear language input. These parents have learned that the best way to improve their children's English skills is to provide them with a solid language base in ASL. There is also a need to provide exposure to appropriate spoken English role models. Some children require more explicit instruction to clarify and separate the grammatical rules of the two languages. The STCC staff are able to provide this instruction in a natural environment.

C)   AMERICAN SIGN LANGUAGE ASSESSMENT RESULTS

Assessment Procedure:

The procedure for assessing the ASL portions of the videotaped samples differed from the English assessments in several ways. Firstly, the ASL was not transcribed into written form prior to analysis but analyzed directly from the videotape. Although transcription of ASL into a written gloss is possible, it was felt that analysis directly from the source would offer a more accurate description of the visual-gestural nature of ASL's grammar. Secondly, an extensive search of the literature indicated that there were currently no formal assessment instruments available for analyzing the ASL skills of young children. Initially, a basic checklist of ASL development was established by the ASL Specialist and used to evaluate the first and second set of videotaped samples. In April 1993, consultation began with Dr. Judith Mounty of Educational Testing Service, New Jersey. The focus of this consultation was to train the Language Specialists to reliably use her recently developed assessment tool, The Signed Language Development Checklist. Although this was a research instrument which had not yet been validated, it was extremely helpful in providing a structure and framework for assessing the children's ASL skills. For more specific information regarding the training procedure with Dr. Mounty, please refer to the Evaluation, Professional Development, and Training section of this report.

The same procedure as with the English assessments was followed with each set of ASL assessments; results were documented and this information was then discussed with parents and STCC staff.

Results:

The results of the ASL assessments grouped the children into four categories. It must be noted that these categories are not based on widely validated normative data, as this type of data is not yet available. The categories indicated below are based primarily on professional judgement, strongly supported by the research available regarding the sequence and categories of ASL acquisition, the results of the Signed Language Development Checklist (which is based on this research), and the experience of observing numerous children learning ASL.

Age-appropriate -   This category includes children who are developing ASL skills in a similar manner and rate as has been observed, and noted in the literature, with other children their age, particularly other Deaf children with Deaf parents.

Emerging -   This category includes two groups of children who demonstrate similar linguistic behaviours; 1) children who are emerging from the pre-language stage due to their young age, and 2) children who have had limited exposure to ASL.

Language Delay -   This category includes all the children demonstrating language skills at a level below that of other children their age. Again, the development of Deaf children with Deaf parents is used in this study as the norm from which to compare.

Second Language -   This category includes children who have established a strong language base in English and are learning ASL as their second language. They demonstrated patterns in word order and usage which were influenced by their knowledge of spoken English. Their language errors were intrusion errors; their ASL production demonstrated patterns which were influenced by their knowledge of English.

The results of the ASL assessments with regard to these four categories are summarized in the following table titled, "ASL Assessment Results". It should be noted that not all the same children are included in each set of assessments due to enrollment changes.

ASL ASSESSMENT RESULTS

H - Hearing Children
D - Deaf Children

PATTERN	SPRING '92	FALL '92	SPRING '93	FALL '93	JAN - APR '94
Age-Appropriate	9 - H 2 - D	7 - H 4 - D	6 - H 5 - D	10 - H 4 - D	10 - H 5 - D
Emerging	0 - H 1- D	0 - H 0 - D	2 - H 0 - D	2 - H 1 - D	1 - H 2 - D
Language Delay	2 - H 2 - D	2 - H 2 - D	4 - H 1 - D	1 - H 1 - D	3 - H 1 - D
Second Language	7 - H	6 - H	5 - H	2 - H	3 - H
TOTAL	**23** 18 - H; 5 - D	**21** 15 - H; 6 - D	**23** 17 - H; 6 - D	**21** 15 - H; 6 - D	**25** 17 - H; 8 - D

Discussion:

The assessments administered through STDP provide information regarding the development of ASL skills in four groups of children between the ages of 2 to 5 years: 1) hearing children with hearing parents (H-H), 2) hearing children with Deaf parents (H-D), 3) Deaf children with hearing parents (D-H), and 4) Deaf children with Deaf parents (D-D).   The available literature in this area has tended to focus on Deaf children with Deaf parents, as these are the natural first language users of ASL.   The inclusion of other categories of children learning ASL provides insights into the nature of ASL development and the process of language acquisition in general. The results of the children's ASL assessments will be discussed within the context of four

grammatical categories: Formational, Morphological, Syntactic, and Perspective.[2]

The Formational Domain refers to how signs are formed, with particular emphasis on the handshapes and movements of signs. At the age of two years, a distinction between the four groups of children (H-H; H-D, D-H, D-D) is not readily apparent; all children are using primarily unmarked (simple) handshapes and basic movements to form signs. At the age of three years a distinction may occur, however, this can not be stated conclusively due to the limited sample size of H-H children at this age. At age three the H-D, D-H, and D-D children were all using a variety of both marked (complex) and unmarked handshapes/movements, whereas the H-H children continued to use only unmarked structures. A few of the D-D and H-D children achieved mastery level (clear and consistent use) of all handshapes/movements at the age of four years, but the majority of the children in these groups did not achieve mastery level until the age of five years. The H-H and D-H children were still developing their formational skills at the age of five years, but again, this was based on a limited number of children in these categories.

The Morphological Domain refers to how children change or modify verb and noun signs to add to or alter their meaning. It was noted that all groups of children tended to modify verbs at an earlier age than when they would begin to modify nouns. The most frequently used verb modifications, by all groups of children, were modifications to indicate the intensity and manner of actions. At the age of four years, children from all four groups were observed to use a variety of verb and noun modifications. The H-H children acquired verb and noun modifications in the same sequence as H-D, D-H, and D-D groups, but at a delayed rate; they were not using any morphological modifications at the age of two years, acquired verb modifications at the age of three years, and at four years had a variety of both noun and verb modifications. It was also noted that even with limited exposure to ASL, the Deaf children with hearing parents were using morphological modifications at the age of two years. This was felt to be related to their readiness to incorporate facial expression and gesture into meaningful communication.

The Syntactic Domain includes the use of spatial referencing, sentence types, and syntactic structures. The use of spatial referencing, or indexing, is a key component of ASL grammar as it allows for the organization of the signing space. The H-H tended to use "real world" referencing (pointing to present objects and people) until the age of four years, although this data is based on a limited number of children. At the age of five years, all the H-H children used "semi-real world" references (pointing to present objects and people as substitutes for non-present objects/people), but only half of the children in this group demonstrated abstract referencing (setting up points in space to refer to non-present objects/people). The H-D group's development of spatial referencing was quite different: at the age of two years, real world and

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[2]Although the terms used throughout this section of the report are widely recognized grammatical categories, they are based on the domains and sub-categories of the Signed Language Development Checklist, copyright by Dr. Judith L. Mounty and Educational Testing Service, Princeton, New Jersey. Similarly, the order in which data is reported follows the organizational structure of the Signed Language Development Checklist.

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semi-real world references were noted; some children demonstrated abstract referencing at age three years, but the majority of children in this group were still using real world and semi-real world references at this age; at the age of four years the majority of children could reference at an abstract level; and, by age five all H-D had developed the ability to use full abstract spatial referencing. The development of D-H and D-D children appears to be similar to that of the H-D group; however, the limited number of D-H at the older ages (four and five years) and D-D children at the younger ages (two and three years) makes it difficult to be conclusive at this time.

The sequence of acquiring sentence types was consistent across all four groups of children: sentences with plain verbs (verbs that do not change when the subject or object of the sentence is varied) and sentences with motion/location verbs (classifiers) were acquired first; followed by sentences with agreement verbs (verbs that change formation/direction to agree with the subject and/or object of the sentence); and, then the final group of sentence types was verb chaining (classifiers used to indicate a series of actions). The H-H children followed the above sequence, but at later ages than the H-D, D-H, and D-D groups. The H-H children demonstrated agreement verbs at age four years, as compared to age two years for the other groups, and verb chaining at age five years, as compared to three years. The D-D children tended to use verbs within verbs (classifiers indicating action) and verb chaining more frequently than the other groups of children.

It was observed that by the age of two years all four groups of children were able to express negation in a variety of ways, including headshake alone, headshake with a non-negative sign, and a headshake with a negative sign. At the age of five years, all groups of children preferred to express negation with a headshake plus a negative sign.

The development of YES/NO questions with facial expression alone was initiated by all groups of children at the age of two years. The data for H-H children was very limited as many of them did not use this structure in the samples elicited. Although all groups of children were using the appropriate facial expression with signs to indicate YES/NO questions at the ages of three and four years, only children from the H-D and D-D groups were observed to add the specific "question" sign ("?"), and only at the age of five years.

In the development of WH questions, the H-D, D-H and D-D groups of children demonstrated the following sequence: "WHAT" and "WHERE" at the age of two years; "WHO" and "WHY" at three years of age; "FOR-FOR", "HOW", and "WHICH" at the age of four years; and, "WHEN" at the age of five years. The H-H children again were rarely observed to use question forms, and the forms noted were the earlier-developing ones, i.e. "WHERE" and "WHO".

The complex syntactic structures assessed included topic marking, topic continuation, relative clauses, conditionals, and rhetorical questions. Barring a few exceptions, these complex structures were not used by any of the groups of children until the age of three years. Topic marking (topic-comment word order with the appropriate facial expression) was the first structure to emerge, followed by rhetorical questions, and then the use of relative clauses developed. The structures of topic continuation (holding the topic sign with one hand, and signing the comment

with the other) and conditionals were noted less frequently. This developmental sequence and distribution of complex structures was similar for all four groups of children. The H-H children began to use complex structures at the age of four years, and at five years only half the children in this group were able to use complex structures. The H-D children were using a variety of complex structures at the age of three years, albeit occasionally incorrectly. At the age of four, the majority of H-D children used complex structures, and at five years they all were able to use complex structures to express themselves. The development of the D-H children appears to be similar to the H-D group, but the data from ages four and five years is based on a limited number of children. The D-D children were consistently and accurately using a variety of complex structures at the age of four years.

The Perspective Domain refers to the signer's ability to assume different roles within a story or conversation. The skills involved include identifying the characters, and indicating a shift in roles through body shift, eye gaze, and facial expression. At the age of five years, the children in all four groups were still developing their skills in this domain. One D-D child was noted to shift the signing space to take the perspective of the character/role they were assuming, which is the most complex level of role play. At the age of five years, the majority of the H-H children were not able to clearly and consistently identify characters and indicate role shifts. At four years of age, half the H-D children clearly and consistently demonstrated role play skills, and this increased to 75% at five years of age. Similar development was noted for the D-H and D-D groups of children.

SUMMARY:

The data indicates that a specific order of acquisition exists for ASL; each level of skill builds upon the next to facilitate further fluency in the language. The age at which children will exhibit each of the stages will vary according to the amount of exposure they have had to ASL. This is reflected in the ASL skills of hearing children with hearing parents; they show a similar progression as the children (either hearing or Deaf) of Deaf parents but at a delayed rate. It is important to note that the Deaf children with hearing parents who entered STCC at a young age (2 years) developed ASL skills on par with the hearing children of Deaf parents. It appears that when these children are in an environment where linguistic information is fully accessible to them, they respond to it immediately and effectively. They initially demonstrate age-appropriate receptive skills with expressive skills that are lacking in sign vocabulary, but include gestures marked with morphological modifications, such as facial expressions and movements. At the age of 3 to 3 1/2 years of age the expressive skills of the Deaf children with hearing parents had reached an age-appropriate level.

Before the age of three years, the two groups of hearing children were able to distinguish Deaf and hearing people and appropriately chose to sign or talk when initiating conversation. Initially, the children with hearing parents would speak to the Deaf people, and similarly, the hearing

children with Deaf parents would sign to hearing people even when the hearing people spoke to them. Both groups of children would occasionally sign and talk at the same time and examples of this behaviour were noted at all age levels. The hearing children with hearing parents' sign choices and word order also tended to demonstrate an influence from their knowledge of English. Some of these children were noted to use random hand movements as "fillers" in their sentences as they struggled with how to express their thoughts. This functions similarly to words like "um" or "ah" in spoken English.

The Deaf children with Deaf parents tended to be the most visually aware; they maintained eye contact during signed interactions, they responded to movements, light flashes, and visual changes in the environment, and they were aware of the world around them (people arriving or leaving, and vehicles/things passing by the windows). The Deaf children with hearing parents varied in their awareness depending on the amount of exposure to Deaf role models. They were aware of visual changes, but needed experience with interpreting the meaning of these changes. For example, they needed to learn that a flashing light meant they were to attend to the person signing an announcement. The hearing children with Deaf parents had natural exposure to the importance of visual information and, therefore, tended to be aware and responsive to it. They varied in how distracted they were by auditory input; some of these children completely tuned out sounds when they were interacting with a Deaf person but others would immediately be distracted. This was also dependent on their age, older children were more responsive to auditory stimuli than younger children, and the meaningfulness of the sound, speech was more distracting than non-speech sounds.

Analysis of the data collected in this project showed that a child's hearing status had minimal influence on his/her acquisition of ASL. More importantly, however, was the finding that through exposure to consistent language models, all four groups of children assessed at STCC were able to develop Deaf cultural behaviours and skills in communicating in ASL.

BILINGUAL/BICULTURAL PROGRAMMING

The STDP proposal identified that there was a need for specialized staff training to work in a bilingual and bicultural daycare. The project's third goal, therefore, attempted to address this need:

> *Train staff to implement bilingual and bicultural programming based on assessment data collected by the Sign Talk Development Project.*

Because of the collective nature of the STCC community, the STDP Team was expected to extend their training of staff to include parents whose children were enrolled in the Centre. This section of the report includes six subsections: 1) development and implementation of ongoing training for STCC staff, 2) staff training workshops, 3) developing bilingual and bicultural resources for STCC, 4) providing workshops for parents, 5) intervention with children, and 6) presentations and publications. All of these subsections emphasize the STDP Team's efforts to improve upon the quality of bilingual and bicultural programming at STCC and, by extension, improve upon the quality of life experienced by families with Deaf and hearing members.

a) Development and implementation of ongoing training for STCC Staff:

A formal orientation meeting with the Sign Talk Children's Centre Staff and the Sign Talk Development Project Team was held on March 16, 1992. During this meeting the background events which resulted in obtaining the grant from the Child Care Initiatives Fund were described. The proposal itself was also explained, and the general procedures for implementing each of the project's objectives were outlined. There was discussion regarding the structure and lines of communication between STDP Team, STCC Staff, STCC Director, STDP Advisory Committee and the STCC Board of Directors. Regular monthly meetings with the STCC Staff and the STDP Team were planned to discuss potential problem situations which may arise between these two groups and to determine mutually agreeable solutions.

The STDP Team supported the STCC Staff by working with the children in the daycare for one morning per week on a regular basis from March to September, 1992. This was initiated to foster a comfortable relationship with the children and also to maintain contact with STCC Staff.

In September 1992, it was felt that more opportunities for the Language Specialists to demonstrate activities for teaching the two languages to the staff were needed. The Language Specialists frequently worked with the children and staff within the Centre; however, establishing

a formal schedule, including sharing the planning of activities and regular meetings for feedback, did not occur until November 1992. The reasons for this delay included turnover of child care worker staff who needed to be trained and oriented in other areas prior to working with the Language Specialists; a new Director starting at Sign Talk Children's Centre; and the general difficulty of arranging meeting time within working hours for daycare staff.

Staff training dealt with four general areas: 1) planning activities for preschool children, 2) clarification and implementation of STCC's communication guidelines, 3) developing skills in the use of language facilitation techniques, and 4) developing effective storytelling techniques.

1. Planning activities for preschool children.

Training in this area focussed on staff planning and implementation of programming that allowed for language learning opportunities. Specific skills taught were: helping all children to participate in the group; balancing group activities to encompass the various language levels; matching activities to the appropriate developmental level of the children; ensuring basic concepts (colours, numbers, size, shape) were incorporated within activities; learning how to introduce a topic or activity to the children; connecting the theme to a variety of activities; using objects, pictures, and games to maintain the children's interest in the discussion and theme; and facilitating the children's transition between activities.

2. Clarification and implementation of STCC's communication guidelines.

This training area emphasized the understanding of STCC's communication guidelines and their use in the Centre. Specific skills were taught including developing the ASL skills of hearing staff members and methods for keeping the two languages separate. A regular part of each monthly meeting with the STDP Team and STCC Staff involved discussing communication situations which were a challenge within the Centre, and possible ways to resolve these difficulties.

3. Developing skills in the use of language facilitation techniques.

This area focussed on the staff members' individual skills facilitating language development. The specific skills taught in this area were: using appropriate questions; following the child's lead; imitating, expanding, repeating, and labelling; talking about what the child is doing and what the staff person is doing; pausing, allowing the child to respond; giving meaning to the child's signs/words even if they are not clear; avoiding commands; modelling rather than correcting; and emphasizing new information.

4. Developing effective storytelling techniques.

This training area focussed on the development of effective storytelling techniques. Because there are so few resources available in ASL, this skill has particular importance to STCC. The specific skills taught in this area included: story selection and presentation (English and ASL) and

expanding stories with pictures, objects, turn-taking, and drama.

In order to implement the training, a regular schedule was established for both the ASL and English Specialists to work with each of the groups of children and each of the staff in the Centre. This involved a total of three one-hour morning blocks (10:00 - 11:00 am), and one afternoon block (2:00 - 3:00 pm) for each Language Specialist. The times chosen corresponded to the times of the day when the more structured activities are conducted with the children.

The Language Specialists would alternate planning these activities and observing staff conduct the activities. Individual meetings with each staff were scheduled monthly to provide written feedback from observations and to plan future activities. This daily interaction and involvement with the children helped to build rapport between the STCC child care workers and the STDP Language Specialists. This process was effective in teaching the staff new skills because it provided suggestions as well as modelling the behaviours for them.

The Language Specialists continued to support the STCC staff in three ways for the duration of the project:
   1) Planning and demonstrating teaching with each group of children once per week while staff observed.
   2) Observing the staff teaching each group of children once per week and providing feedback about their activity, communication, and teaching strategies.
   3) Regular monthly meetings with STCC staff to discuss programming and resolve issues.

Consultation with STCC staff was discontinued during the summer months due to staff vacations, the involvement of summer students, and the frequent field trips and special activities.

At the end of May 1994, STCC moved to a new location within the Deaf Centre Manitoba. This was a busy time for STCC Staff settling into the new Centre and the beginning of the documentation phase for STDP Team. For these reasons, it was an appropriate time to bring closure to the direct work of the Language Specialists with the STCC Staff and children. The Language Specialists continued to be informally involved with STCC activities during lunch hour, circle time, and special events.

b) Workshops for STCC Staff:

During the first six months of the project, no staff workshops were held, contrary to what was initially planned. There were two reasons why staff workshops were not feasible at this time:

   1. The analysis of the language videotapes (both English and ASL) was not completed. It was felt that more specific information regarding the children's language skills was necessary before workshops could be planned and provided.

2. Several staff changes within STCC, including the Director position, were planned during the summer months. Investing time to train and work with short-term staff was not considered useful at this time.

For these reasons the plans for workshops and training with STCC staff were postponed to the Fall 1992, when they could be incorporated into the overall programming at STCC. Five workshops were conducted with staff between November 1992 and April 1994:

Workshop #1: Agreement Rules for Healthy Teamwork
(November 7 and 8, 1992)

Workshop #2: Observation and Assessment of Other Local Daycare Centres
(December 21, 1992)

Workshop #3: Procedures for Videotaping Children
(October 7, 1993)

Workshop #4: Cross-Cultural Awareness
(December 8, 1993 and March 28, 1994)

Workshop #5: Language Development Checklist
(March 30, 1994)

An outline of the information presented in each of these workshops is included in Appendix A.

c) Developing Bilingual and Bicultural Materials:

The existing materials related to language facilitation and instruction at Sign Talk Children's Centre were reviewed by the Language Specialists in August 1992. It was noted that many new materials were needed. In conjunction with the STCC Director and Staff, materials were priorized and purchased including:
1. Children's Books
2. Videotapes - children's stories presented in ASL
3. Language Games - for English alphabet and fingerspelling
4. Dramatic Play - costumes, puppets, and housekeeping items
5. Therapy Materials - for assessment and remediation of children with speech and language disorders
6. Lesson Planning Books and Resources

Children's Stories

During the course of the project, the lack of existing teaching materials and resources available in

ASL and reflecting Deaf culture became evident. In January 1994, an opportunity to receive additional funding through Health and Welfare Canada to develop teaching materials in ASL was made available to STCC. It was decided that a videotape of children's stories would be an excellent resource for our Centre and any other school or centre involving Deaf children. There are currently numerous ASL videotapes of children's stories available, but they all originate in the United States. It was felt that a videotape reflecting Canadian Deaf values and perspectives was needed.

In May 1994, David Burke was hired as the Coordinator for this special project. David is a well-known American Sign Language Instructor in the Winnipeg area and an extraordinary storyteller. At the end of June 1994, the STDP Team met with David to develop a timeline and plans for the implementation of this project. A list of potential storytellers was drafted, the studio was contacted and the videotaping process was discussed. David was responsible for recruiting the storytellers, viewing all the stories, providing feedback and determining which of them were acceptable. A range of storytellers were selected from young people to elders, each telling stories on a variety of topics.

The videotaping occurred in the Red River Community College studio on August 30 and 31, 1994. The editing and final production process was then concluded to provide 50 videotapes for distribution. This special project received much support from the Deaf community in Winnipeg.

d) Workshops for Parents:

The Project Team decided that, prior to providing workshops for parents, information needed to be collected. Specifically, it was necessary to identify parents' needs and concerns regarding their children's bilingual development, as well as their own needs for encouraging this development. For this reason, the Language Specialists met with parents individually and used a questionnaire to collect this information. The responses indicated that parents were interested in attending workshops on communication in a home with Deaf and hearing family members and behaviour management with children. As well, parents wanted opportunities to socialize with the children, parents, and staff of STCC.

1. Communication in Families with Deaf and Hearing Members

On November 30, 1992, the first workshop was provided for parents and other interested members of the community on the topic of "Bicultural Families; Deaf and Hearing Living Together". This workshop was conducted by Charlotte Evans, English Specialist, and Rita Bomak, Community Outreach Worker at the Society for Manitobans with Disabilities, who both attended the conference of the same name in Toronto, November 19 - 21, 1992. The workshop was well received, but very few parents from STCC attended. It was felt that a more individualized approach may be necessary to reach parents, rather than providing general evening workshops.

A discussion group lead by STCC parents was held in June 1993, to allow for a more informal presentation of this topic. This approach was successful in helping parents to share their ideas, frustrations, and personal experiences.

2. Behaviour Management

In June 1993, two evening workshops on the topic of behaviour management were conducted by Bev Rickey, a Behaviour Management specialist contacted through the Manitoba Child Care Association's Consultation and Training Service. Once again attendance for these workshops was less than expected. It was felt that this was due to the month of June being a busy time for families with end-of-school-year activities and preparation for summer holidays. The parents who did attend were very positive about the workshops and the information presented. It was felt that further workshops focusing on developing parenting skills and providing parent support should be offered in the Fall of 1993.

The feedback from parents who attended the workshops in June 1993, indicated that an ongoing parent group was preferable to a series of workshops on different topics. The Language Specialists were also concerned about making the parent group linguistically and culturally accessible to the Deaf parents. For these reasons, Wanda Warkentin, a local Deaf parent with training in leading the "Nobody's Perfect" parent program, was contacted to facilitate a group for STCC parents.

The "Nobody's Perfect" parent program began on October 12, 1993, and continued for six consecutive Tuesday evenings (7:00 - 9:00 pm) until November 16, 1993. Child care was provided. The only negative factor with this program was the low attendance; on average five parents attended each session, and the group was not consistently the same parents each week. It was felt that the cold weather of January and February made it difficult for parents to attend evening meetings.

Planning for subsequent parent programs and workshops focused on resolving the issue of parent attendance. Ideas included providing home visits, charging a small fee for workshops to increase commitment, and again meeting with parents to determine their needs and preferences.

3. Social Events with STCC Families

A "Family Night" was held at STCC once each year (April 30, 1993 and April 20, 1994). This provided an opportunity for parents and children to socialize, as well as provide parents with the following:

> - books, videotapes, games, and other materials available for parents to borrow from the STDP Office were on display

- parents were able to sign-up for future workshops and events
- videotapes of a variety of activities in STCC were shown throughout the evening
- updates of STCC and STDP activities
- discussion of future topics for parent education
- announcements of upcoming activities (STCC activities and activities of the general Deaf community)

The Family Nights were well attended. It was felt that scheduling the event early in the evening (5:00 - 7:00 pm), providing food, and welcoming all family members contributed to the success of this event.

A final information night was held on September 30, 1994, allowing the parents, staff and community members the opportunity to learn about STDP's research regarding children learning ASL and to view the materials produced by the project (ie: manual, final report and children's stories videotapes).

e) Intervention with Children:

The Language Specialists provided individual intervention for several children with delayed or disordered language development based on the results of language assessments. The English Specialist worked with children in individual or small group sessions to provide some additional stimulation and exposure to the grammatical structures of English. In a similar manner, the ASL Specialist provided intervention with Deaf and hearing children needing to develop their ASL skills. Children were seen by both Language Specialists if they demonstrated delays in both English and ASL.

f) Presentations and Publications:

The STDP Team were invited to share their research at a number of conferences and networked with professionals around the world.

October '92	Jan North, from the Roberta Reid Centre, North Rocks, Australia, visited STCC and met with the STDP Team to collect information about bilingual and bicultural programming. Correspondence with Ms. North continued for the length of the project.
April '93	TESOL (Teaching English to Speakers of Other Languages) '93 (Atlanta): The Language Specialists presented a paper titled "Kids R Bi-Bi; Sign Talk Development Project".
May '93	Canadian Child Care Federation Conference (Toronto): The STDP Team displayed information about STDP alongside other CCIF projects.
July '93	University of Manitoba (Winnipeg): The Language Specialists participated in a graduate course in Educational Psychology on "Issues in Deaf Education" and presented lectures on ASL acquisition and Bilingual and

	Bicultural Education.
August '93	ASL Intensive Program (Winnipeg): The English Specialist presented a workshop of the principles of Bilingual and Bicultural Education.
Summer '93	ACEHI(Association of Canadian Educators for the Hearing Impaired) Journal Publication of summary report for first year of STDP.
March '94	TESOL '94 (Baltimore): The Language Specialists and the STCC Director presented a workshop titled "Meeting the Challenge; Deaf and hearing children's language needs".
April '94	Manitoba Child Care Associaition Conference (Winnipeg): The Language Specialists presented and displayed STDP information at a CCIF showcase.
May '94	Canadian Association of Speech Language Pathologists and Audiologists Conference (Winnipeg): The Language Specialists presented a workshop titled "Communication with Deaf and hearing children".
August '94	ASL Intensive '94 (Winnipeg): The Language Specialists presented information about Children's ASL Development.

PREPARATION OF THE MANUAL

In March 1993, the format, content, and distribution of the manual was discussed with the Evaluation Team. It was agreed that the manual be a document that could be used by practioners and that it should outline the components of a successful bilingual and bicultural program involving Deaf and hearing preschool children. At that time, it was determined that is should include a description of the communication policy, curriculum, staff qualifications, and other areas of the program. The manual was to differ significantly from the project's final report, which would include a description of the Sign Talk Development Project and, more specifically, outline the procedures for assessment, collection of data, and consultation with staff and parents.

The process for hiring a Publishing Consultant was initiated in June 1993. This included preparing a job description/advertisement and obtaining approval from the STCC Board of Directors to hire an appropriate applicant. Following the release of the job advertisement, two applications for the position were received. Interviews with these individuals were held on August 4, 1993, and Greg Evans was selected to work with the project. His contract began on August 23, 1993 and his first task was to compile information regarding the Introduction and Background sections of the manual.

The primary focus of the project during July and August 1994 was on the writing of the manual and final report. Through regular meetings with the Publishing Consultant the sections of the manual were developed to various stages of completion. The content for each section was discussed as a team and then written drafts were completed. Refinement and organization were required as well as input and suggestions from staff, parents and Board members before final publication could occur.

Five hundred copies of the manual, titled "Discovering With Words and Signs; A Resource Guide for Developing a Bilingual and Bicultural Preschool Program for Deaf and Hearing Children", were distributed to a variety of individuals and agencies throughout Manitoba and across Canada and the U.S., who had expressed interest in the project over the years.

3. EVALUATION, PROFESSIONAL DEVELOPMENT AND TRAINING:

EVALUATION TEAM

A crucial component of any project is that of an external Evaluation Team to monitor the project's success at various intervals throughout the duration of the project. The following highlights the process and relationship between STDP and the Evaluation Team.

Contracting the Evaluation Team:

Following an extensive recruitment process, two proposals for the evaluation of the STDP were submitted to the Advisory Committee in December 1991. Each of these proposals were reviewed by the STDP Advisory Committee and the STDP Team. On March 12, 1992, a decision was made to accept the proposal submitted by Dr. Michael Rodda of Edmonton, Alberta.

April 1992

The initial meeting of the Evaluation Team and the STDP Team occurred on April 9 and 10, 1992 in Winnipeg. These meetings involved Dr. Michael Rodda of Edmonton, Alberta, and Ms. Rita Bomak of Winnipeg, Manitoba. Dr. Carol Erting of Washington, D.C. was unable to attend at this time; therefore, a second meeting was planned for May 1992, to involve all three Evaluation Team members.

This initial meeting provided the Evaluators with information regarding the Sign Talk Children's Centre, including background, policies, and programming, as well as an opportunity to observe the STCC children and staff during a typical day. The Sign Talk Development Project was discussed and the structural relationships between the STCC Board, STDP Advisory Committee, STCC Director and Staff, and the STDP Team were clarified. The contract for the Evaluation was finalized with Dr. Michael Rodda, the Evaluation Team Manager, including timelines and roles of the team members.

May 1992

Meetings with all three members of the Evaluation Team (Dr. Michael Rodda, Dr. Carol Erting, and Ms. Rita Bomak) were held on May 23 and 24, 1992. In addition to providing feedback regarding the collection and analysis of English and ASL videotapes, the Evaluators also observed

the children and staff within the Centre. Suggestions for possible ASL Consultants to the STDP were also discussed.

July 1992

Meetings with the Evaluation Team took place on July 23, 24, and 25, 1992. All members of the Evaluation Team were present, including Dr. Michael Rodda, Dr. Carol Erting, and Ms. Rita Bomak. Ms. Marie Philip, ASL Consultant, also attended these meetings. The four objectives of the STDP were discussed and feedback regarding progress to date was provided. Dr. Rodda and Ms. Bomak also conducted interviews with the STCC parents, staff, and members of the STDP Advisory Committee and Board of Directors. The results of these interviews indicated that most people felt very positive about STDP. The one area where some improvement was recommended was in establishing a better relationship with the STCC Staff; team building and role clarification were suggested.

January 1993

In January Dr. Rodda visited the STDP to informally monitor progress. He was able to provide some suggestions for resolving the issue of the ASL Consultant and the resulting delay in training.

May 1993

The Evaluation Team met with the STDP Team and STCC Director, on May 6 and 7, 1993. These meetings provided an opportunity for the Evaluation Team to observe the children and staff in STCC, watch videotapes of the children's language samples, and discuss the progress related to each of the four objectives.

October 1993

The Evaluation Team met with the STDP Team and STCC Director on October 21, 22, and 23, 1993. These meetings provided an opportunity for the STDP Team to update the Evaluation Team as to the progress on the four objectives of the project. The agenda also included finalizing the procedures for evaluating each of STDP's objectives.

January, 1994

Videotapes of the 10 children (7 hearing; 3 Deaf) who were part of the first assessment in June 1992 and part of the final assessment in January 1994 were sent to the Evaluation Team for comparative analysis. Also included in this package of videotapes of individual children were videotapes sampling a variety of group activities in STCC during the Spring 1992 and similar activities in January 1994.

February 1994

Dr. Michael Rodda and Ms. Rita Bomak of the Evaluation Team met in Winnipeg on February 18 and 19, 1994. During these days they conducted interviews with all current parents, staff, and Board members of STCC. Parents and Board members who were unable to make an appointment during these two days were interviewed by Rita Bomak at a later date. The results of these interviews were summarized by the Evaluation Team and presented to the STDP Team and STCC Director during meetings in June 1994.

June 1994

The Evaluation Team, STCC Director, Assistant Director and STDP Team met in Winnipeg on June 9 and 10, 1994. The primary objective of this meeting was to discuss the Evaluation Team's findings. The Evaluation Team conducted independent assessments of both English and ASL language samples and these findings were shared. (Refer to the Evaluation Team's Report). A jury appraisal was also conducted in order to assess the project's overall impact upon the daycare program (objective #3). The forum was such that the STDP Team were afforded the opportunity to clarify any statements made by the Evaluation Team prior to them being printed. The Evaluation Team also met with the STCC Board of Directors on Saturday June 11, 1994. A brief synopsis of the findings was presented and Board members were able to ask questions of the Evaluation Team.

Fall 1994

A final draft of the Evaluation Report was submitted to the STDP Team for their clarification and input prior to publication and distribution.

TRAINING ASL ASSESSMENT SKILLS:

As mentioned in Background Information, the ASL Specialist was hired with the understanding that a training component be added to the position. The initial training plan included "in-house" training by the English Specialist and hiring an external consultant to provide training in the areas of ASL linguistics, acquisition, and assessment.

a) Initial Training with the English Specialist:

Training sessions by the English Specialist with the ASL Specialist were conducted twice weekly (March - June 1992). These sessions thoroughly covered the linguistic theories and literature related to language acquisition in children. Training regarding linguistic techniques of observation and recording occurred during the process of collecting and analyzing the ASL videotapes with the ASL Specialist.

b) Professional Development with the ASL Consultant:

In June, 1992, Marie Philip of The Learning Centre for Deaf Children, Framingham, Massachusettes, agreed to be involved with STDP as the ASL Consultant. Marie Philip made her first visit to STDP from July 20 - 25, 1992. The last three days involved the members of the Evaluation Team as well as the STDP Team. Discussion and training with Marie Philip included the following information:

1. ASL Assessment

   The problems with adapting the English-based test The Communication Screen were discussed and alternatives suggested. This included developing a procedure for analyzing language samples collected in a variety of situations.

2. Working with STCC Staff

   The need to clarify the Communication Policy at STCC and how to ensure that it is being followed was emphasized. This topic also covered information regarding expectations and approaches to literacy in the preschool years, storytelling in ASL, activities to build language skills, interaction of Deaf and hearing people working together and the need for regular team meetings.

3. General Comments

   Other helpful suggestions were provided regarding current literature, videotaping procedures, effective public relations, and people to contact.

A detailed plan for consultation was established with Marie Philip. Unfortunately, this training plan and Marie's November visit had to be cancelled due to Marie's ill health. In February 1993, arrangements were made with Dr. Judith Mounty to train the ASL and English Specialists in the use of the Signed Language Development Checklist, as Marie Philip was unable to continue in her role as STDP's ASL Consultant. This initial training session occurred on April 17, 1993, in Atlanta, to coincide with the Language Specialists' participation in the TESOL (Teaching English to Speakers of Other Languages) Conference. Prior to this training session, Dr. Mounty forwarded copies of the Checklist Training Manual and Videotape to STDP. The training workshop included a discussion and clarification of training materials and the presentation of a sample coded Checklist.

The training procedure for the Signed Language Development Checklist involved "testing" for inter-rater reliability. The Language Specialists coded the standardized videotaped samples and checked these against the key prepared by the Checklist Project Director, Dr. Judith Mounty. The results of this testing were discussed and specific feedback and guidelines were provided to facilitate the Language Specialists' use of the Checklist. This segment of the training was conducted by correspondence.

Dr. Mounty visited the Sign Talk Development Project on August 28 - 31, 1993. The purpose of this visit was to ensure that the Signed Language Development Checklist was being implemented

appropriately by the Language Specialists. Dr. Mounty viewed videotapes with the Language Specialists and provided feedback about the coding of language structures. This training was very successful and the Language Specialists developed competency in using the Signed Language Development Checklist for ongoing analysis of the children's language skills.

Throughout the process of analyzing the videotaped ASL samples using the Signed Language Development Checklist, ongoing contact by phone and fax was maintained with the ASL Consultant, Dr. Judith Mounty.

Dr. Mounty visited Winnipeg again on February 18 - 20, 1994. During this time, Dr. Mounty reviewed the assessments completed by the ASL Specialist from the Fall 1993 videotapes. The feedback she provided indicated that the ASL Specialist competently administered the Signed Language Development Checklist on these samples. It was felt that future on-site visits would not be necessary. In addition to providing consultation with the Language Specialists, Dr. Mounty made a general presentation regarding her research and the Checklist. This presentation was very well attended by parents, staff, and members of the Deaf community.

Contact was maintained with Dr. Mounty and she was involved in the documentation of research on a consultative basis.

Professional Development:

The STDP Team was also able to take advantage of a number of professional development opportunities. The following is a list of workshops, seminars, and conferences that the staff attended:

March '92	TESOL '92 (Vancouver): Teaching English to Speakers of Other Languages conference.
April '92	Deaf Mosaic (Winnipeg): Mental Health and Deaf People conference.
June '92	Cochlear Implant Conference (Winnipeg): Auditory verbal therapy and cochlear implant technology conference.
November '92	Bi-Bi Families Workshop (Toronto): Workshops on bilingual and bicultural families, Deaf and hearing people living together
October '92	All Kids Can Learn ASL (Rochester, NY): Workshops on teaching ASL to children.
July/Aug. '93	ASL Intensive Program (Winnipeg): Advanced ASL Course for the hearing STDP Team members.
June '94	New York State ASL Teacher's Association Conference (New York, NY): Workshops on ASL teaching materials and methods, as well as ASL structure and grammar.
July '94	Association of Visual Language Interpreters of Canada Conference (Winnipeg): Workshops on interpreting and the relationship between the Deaf Community and interpreters.

4. RECOMMENDATIONS AND CONCLUSION:

Adding a research and training project to an existing daycare involves cooperation, change, and, at times, conflict. This was particularly true of the Sign Talk Development Project's experience with Sign Talk Children Centre. The following recommendations are based on the STDP Team's experience and are intended to benefit future research or training projects. The recommendations are grouped as follows: a) working with staff, b) working with parents, c) working with an Evaluation team, d) working with a Board of Directors, e) working with consultants, and f) working with the Deaf community.

A) WORKING WITH STAFF:

1. The most effective method for training or teaching staff was direct demonstration and observation with them "on the floor". When staff training was done in the Centre, staff received immediate feedback, were able to practise a skill under supervision, skills were displayed in a concrete fashion, and information was practical and observable. As well, the difficulty of trying to schedule times with a staff person was avoided if training took place inside the Centre.
2. Providing feedback to staff needs to be immediate -- either in written form or short face-to-face interaction.
3. Lines of authority need to be clarified and respected. It was important to have all organizational matters and information go through the Director, ie. changing schedules, meeting times, and interaction with parents.
4. Ensure that staff are financially compensated for extra work. Given the traditionally low salaries found in daycares, it is not appropriate to expect them to volunteer.
5. It must be acknowledged that affiliating a research project with a daycare centre provides both benefits and burdens for the existing organizational structure. If the daycare centre is not financially secure and has a high staff turnover, the management of a professional research team is an additional strain on the communities resources.

B) WORKING WITH PARENTS:

1. Regular face-to-face contact with parents is very important. By far the best way of communicating upcoming events was to inform parents in person.
2. When planning events or workshops for parents, make sure that child care is provided.
3. Workshops lead by Deaf people are most effective for reaching other Deaf parents. Some Deaf parents find it difficult to learn through an interpreter.
4. There were a variety of needs among the parents of STCC. STDP was not able to meet all of their needs. Perhaps future projects should consider a home visit program.

C) WORKING WITH AN EVALUATION TEAM:

1. The importance of working with an evaluation team cannot be overstated. The benefits were extensive; not only can they provide evaluation, but they also can provide much needed guidance and advice throughout the duration of the project.
2. Begin the project with role clarification and clear expectations for both project staff and the evaluation team.

D) WORKING WITH A BOARD OF DIRECTORS:

1. It is important to identify supervision for the project. At times this was confusing. The STDP Team had no clear supervisor. Although this is not a role to be expected from a volunteer board, the Board members were expected to become supervisors at times.
2. In retrospect, continuing with the Advisory Committee might have alleviated the confusion of not having a clear supervisor. An advantage to having the Advisory Committee was that they could focus specifically on the needs of STDP. The disadvantage was that it placed more emphasis on the separation/distinction between STCC and STDP.

E) WORKING WITH CONSULTANTS:

1. As resources are limited, this option provided an effective way to gain someone's expertise for specific aspects of the project.
2. It is very important to try and use local consultants wherever possible. Unfortunately, despite an extensive search, STDP needed to go outside Canada for our ASL Consultants.

F) WORKING WITH THE DEAF COMMUNITY:

1. Unlike other projects that have successfully been piloted in Winnipeg, the STDP did not have Deaf adults as its primary "consumers". In the absence of a group of Deaf adults speaking on behalf of the project, the STDP Team needed to do a lot of public education in the Deaf community.
2. In retrospect, the project needed to have more Deaf people involved in the planning stage (proposal writing), so that there would have been more community ownership from the beginning.

CONCLUSION:

There are very few bilingual and bicultural programs for Deaf and hearing children that exist in North America and throughout the world. There are no bilingual and bicultural programs for Deaf and hearing children that have documented and described their policies, programming, and progress. For this reason, the work of the Sign Talk Development Project is so significant. It provides insight into how children acquire American Sign Language, and how learning two languages in two different modes can influence each other. It also provides guidelines for teaching, learning, working, and communicating in a program involving Deaf and hearing children, staff, and parents. The Sign Talk Development Project also demonstrates what can be accomplished when the responsibility of research and programming for Deaf children is placed where it belongs - in the hands of the Deaf community.

The work of the Sign Talk Development Project is by no means definitive or conclusive; it is the first step. It takes us one step closer to becoming bilingual and bicultural people ourselves, and more importantly, to help children grow into bilingual and bicultural individuals.

APPENDIX

WORKSHOP OUTLINES:

Workshop #1: Agreement Rules for Healthy Teamwork
(November 7 and 8, 1992)

Workshop #2: Observation and Assessment of Other Local Daycare Centres
(December 21, 1992)

Workshop #3: Procedures for Videotaping Children
(October 7, 1993)

Workshop #4: Cross-Cultural Awareness
(December 8, 1993 and March 28, 1994)

Workshop #5: Language Development Checklist
(March 31, 1994)

STCC//STDP RETREAT

November 7 - 8, 1992
Gimli, Manitoba

Agenda

1.   **Group Norms**

2.   **Activity One: "Getting to know each others' skills"**

3.   **Activity Two: "What is an effective team?"**

4.   **Activity Three: "The STCC/STDP Team"**

5.   **Activity Four: "The Agreement Rules for Healthy Team Work"**

6.   **Activity Five: "Practise using the rules"**

AGREEMENT/RULES FOR HEALTHY TEAM WORK:

1.   We believe there is plenty for each of us if we cooperate - competition (thinking only of oneself) results in not enough for all.
2.   We believe that each person's wants/needs are equally important; that each person has equal rights to express his or her wants/needs.
3.   Each of us promises to be 100% honest - I will ask directly for what I want.
4.   Each of us promises to share negative feelings or blocks/ obstacles.
5.   Each of us promises to share positive feelings and give positive feedback.
6.   Each of us promises to follow this: NO ASK = NO ACT
     a)   I will not expect others to do something for me without my directly asking for it.
             (NO MANIPULATION)
     b)   I will not do things for other people if they did not ask directly for it.
             (NO RESCUE)

Observation and Assessment of Other Local Daycare Centres

December 21, 1992

NAME OF DAY CARE CENTER:_____

OBSERVATION QUESTIONS:
(These are meant as guidelines - you do not need to answer all the questions, and you can add information that is not included here.)

PHYSICAL ENVIRONMENT:

1. Describe the floor plan of the center - what are the different activity areas (drama, sensory, science, etc.)?

2. Is the gym separate - how many rooms and what are they used for?

3. Where is circle/group time? Where is lunch, and naps, etc.?

4. What do you notice about the room's atmosphere and decorations (colours, children's pictures, etc.)

5. Comment on anything else you see in the room - toys, bulletin boards, areas, etc.

DAILY SCHEDULE:
(Some of this information may be available from the written forms -parent book, schedule, job descriptions, etc. - that will be given to the first group at each day care center.)

1. How many children are enrolled at the center (and what are their ages)?

2. How are the children divided into groups? For which activities do these group change (large groups, small groups,   etc.)?

3. How many staff work there? What are the staff positions (Director, Assistant Director, Floor Coordinator, CCW, etc.)?

4. How do the staff work together - share responsibilities?

5. How do the staff and children change from one activity to the next (transition times)? Do the children know themselves what to do?

6.   Comments about the daily schedule:

ADULT-CHILD INTERACTION:

1.   What activities did you observe - describe both what the children were doing and what the adults were doing during each activity.

2.   How did the adults talk to the children? - repeat, question, and extend what the children say?

3.   Did you observe any discipline of the children? Were the rules clear? Was cooperation and problem-solving encouraged?

4.   How did the staff include children in an activity if the children did not want to participate?

5.   How did the staff play with the children? Were they directly involved? Did they follow the children's ideas? Were they observing?

6.   Comment on any activities or interaction between children and adults:

GENERAL INFORMATION:

1.   What is the center's philosophy towards child care?

2.   Does the center have a behavior policy?

3.   Does the center have a formal process for evaluating the children's progress/development?

VIDEOTAPING WORKSHOP

STCC

OCTOBER 7, 1993
5:30 - 8:30

ENVIRONMENT:

1. A familiar environment (staff and room) allows the children to feel more relaxed and comfortable.

2. Videotaping Schedule: (form)
    - 2 year olds (5)
        1) Deaf/hearing staff - books and toys
        2) Group time
        3) Home - family/parents/siblings

    - 3 year olds (7)
        1) Deaf/hearing staff - books
        2) Group time
        3) ASL Specialist - Videotape with ASL story
        4) Home - family/parents/siblings

    - 4 and 5 year olds (7)
        1) Deaf/hearing staff - re-tell "Three Bears" story
        2) Group time
        3) ASL Specialist - Videotape with ASL story
        4) Home - family/parents/siblings

3. Materials used for collecting language samples:

    - less structured activities are better for eliciting more complex and abstract language, i.e., children talk about things that are not present, or that happened in the past.

    - older children (4 and 5 years) are able to have a conversation or tell a story without any materials; younger children require some structure to get them talking, for example toys or books.

- select toys that the child is interested in, but make sure they are not too complex or new to the child, as it will take all their attention and concentration and they will not talk much.

- we will be asking you to help decide which toy would be best for each of the 2 year old children; try to observe during which activity or toy they talk/sign the most.

4. Length of Sample
- we need at least 50 sentences from the child to analyze their language skills; for most children this is easily reached in 10 - 15 minutes of conversation.

5. Using the Videocamera
a) positioning is important, particularly for collecting the ASL samples; be sure the camera is getting a clear and close view of the child's face. If the child moves around while telling the story, try to re-position them without causing too much of a disruption.

b) lighting is also very important for the ASL samples; make sure lights are on, don't set up in front of a window or have light shining from behind the people being taped.

c) it may be necessary to use the "clip-on mic" for some children during the English sample; if the child speaks very quietly, or if there is alot of background noise.

d) the background wall/colour is best if it is plain (not patterned) and a neutral shade, dark if possible; videotaping in front of a shelf full of different toys is distracting.

INTERACTION:

1. Try to limit your own talking/signing during the conversation; don't be afraid of silent pauses.

2. Try not to fill up every empty space in the conversation with questions - this encourages the child to let you take the lead and they become passive.

3. If you comment on your own feelings and opinions you create a more natural

atmosphere; asking questions, especially ones you know the answer to, creates a "testing" atmosphere.

4. If the child does not initiate conversation, ask open-ended or leading questions. For example, "This is broken. What do you think happened to it?", or "What's going on here?", or "What do you see?", etc.

5. When the child uses the wrong sign/word or forms the sign/word incorrectly, don't criticize them or point out their error, but model the right way for them.

6. Be aware of the child's age and language level; if you know they are capable of using more clear or complete language - ask them to clarify/repeat for you.

CROSS-CULTURAL AWARENESS WORKSHOP

March 28, 1994
Greg Evans

The goal of cross-cultural awareness is to turn judgement into curiosity.

1. **Group Discussion:**

    Why is cross-cultural awareness important for STCC/STDP staff?

    a) Deaf people strong identity; hearing people are identified by Deaf people; b) win/lose, lose/lose, win/win situations; c) goal/purpose of STCC and d) "Deaf people expect too much/Hearing people always take advantage of Deaf people".

2. **Culture vs. Personality:**

    What are cultural differences and what are personality differences?

3. **Barriers to Cross-Cultural Awareness.**

    Group Activity: In small groups, identify barriers to cross-cultural awareness that exist between Deaf and hearing staff.

    Individual Activity: Individually, identify our own barriers to cross-cultural awareness.

4. **Identifying Our Fears.**

    Group Activity: In small groups, identify the aspects of cross-cultural awareness that we are afraid of -- *what is the worst possible thing that Deaf/hearing staff could do to us?*

5. **Contracting for Change:**

    As a group, we will establish a contract for Deaf and hearing staff to work together to eliminate barriers and create a safe environment.

LANGUAGE DEVELOPMENT

CHECKLIST

The following Checklist can be used to provide a basic assessment of preschool children's language development in both ASL and English.

ASL Development

Stage I

- ❏ Begins to use simple handshapes
  eg: B, C, O, A, S, 1, 5
- ❏ Begins to use simple movements
  eg: straight forward, up, down
- ❏ Begins to use simple single-sign vocabulary
- ❏ Begins to combine signs into simple two-sign sentences
- ❏ CLASSIFIERS: Object
  eg: (2h)CL: O - pole
- ❏ Negation - Headshake alone or headshake with negative sign
  eg: <u>headshake</u>   <u>headshake</u>
      NO   CAN'T
- ❏ Questions used include YES/NO and WHAT, WHERE
  eg: <u>wh-q (frown)</u>   <u>yes/no - q (eyebrows raised)</u>
  WHERE   MINE
- ❏ Indexes (points to) present objects and people

❑   Storytelling is not always clear - copying actions and facial expressions

Stage 2

❑   Try to use complex handshapes, but often simplify (substitute simple handshapes)
eg: WATER - with 5 handshape replacing the W handshape

❑   Uses simple movements
eg: straight forward, up, down

❑   Use of Verb Modification
eg: WALK - stroll, WALK - quickly; WALK - for a long time

❑   Three or four sign sentences

❑   CLASSIFIERS Object + Movement
eg: CL: 3 - car driving forward

❑   Negation - Headshake with non-negative sign
eg: headshake
ME WANT MILK

❑   Questions used include YES/NO and WHAT, WHERE, WHY
eg: wh-q (frown)
GO HOME WHY

❑   Storytelling (different roles, body shift, facial expression)
     ❑   substitute present objects to talk about objects and people not present
     ❑   character identification and shifts not always clear

Stage 3

❑   Begins to use complex handshapes
eg: X, Y, T, R, 3

❑   Begins to use complex movements
eg: wiggly movement

❑   Begins to use Verb Modification to indicate number and distribution
eg: FALL - singular; FALL - plural; FALL - random

❑   Begins to use Noun Modification to indicate intensity, size, and quality of objects

eg: BOWL - big

☐ Questions used include YES/NO and WHAT, WHERE, WHY, FOR-FOR, WHO

Sentence structures:

☐ Begins to use Topicalization

ex: <u>topic (raise brow)</u>

MY ROOM, PAINT TOMORROW

☐ Begins to use Rhetorical questions

eg: <u>rh-? (raise brow)</u>

TURTLE RUN, WHO WIN, TURTLE

Storytelling:

☐ Inconsistent use of points in space to represent non-present objects/people

☐ Role-play through body shifts, eye gaze, and facial expression

Stage 4

☐ Consistent use of complex handshapes and movements

eg: fingerspelling short words and names

☐ Use of Noun Modification to indicate the spatial arrangement of objects

eg: TREE++ - in a row; TREE++ - in a cluster

☐ Use of bracketing to indicate WH questions

eg: <u>wh-? (frown)</u>

WHERE GO WHERE

Sentence structures:

☐ Topicalization (Topic Continuation)

☐ Rhetorical questions

☐ Conditionals (IF or SUPPOSE)

eg: <u>cond.(brow raised)</u>

IF-SUPPOSE RAIN, GAME CANCEL

☐ Appropriate use of full abstract referencing for objects/people not present

☐ Storytelling (character identification, role play, role shifts) is clear and consistent

English Development

18 MONTHS: _____

Receptive Language
- ☒ Follows one-step directions without gestures, eg. "Give me the doll"
- ☐ Points to several basic body parts on self, eg. eyes, nose, ears, feet
- ☐ Understands simple questions
- ☐ Understands approximately 50 words

Expressive Language
- ☐ Uses five or more true words consistently
- ☐ Uses voice in conjunction with pointing and gesturing, eg. grunt, "ah", or word

TWO YEARS: _____

Receptive Language
- ☐ Points to body parts and clothing on others (person, toy, picture)
- ☐ Follows two-step directions, eg. "Get your coat on and sit down"
- ☐ Selects a requested item from a group of 5 familiar objects
- ☐ Understands negative "no", "not", "no more"

Expressive Language
- ☐ Begins combining words into simple two-word sentences
- ☐ Uses some questions ("what", "where")
- ☐ Has a vocabulary of 50 or more words
- ☐ Occasionally uses 3-word sentences
- ☐ Answers "yes/no" questions correctly, eg. "Is it cold outside?", "Do you want a cookie?"
- ☐ Begins using some pronouns ("it", "you", "my", "this", "that")
- ☐ Speech is frequently simplified and difficult to understand at times

THREE YEARS

Receptive Language
- ❑ Understands what common objects are used for, eg. "cup", "knife", "comb", "hammer"
- ❑ Understands size differences, eg "big - small"
- ❑ Enjoys listening to simple stories for five minutes
- ❑ Understands prepositions ("in", "on", "under", "in front", "behind")
- ❑ Understands the contrast between "he" and "she"

Expressive Language
- ❑ Uses simple sentences (three to five words in length)
- ❑ Often uses pronouns correctly, eg "I", "you", "he", "me"
- ❑ Uses negative forms, eg. "don't", "can't", "doesn't", "none"
- ❑ Uses some irregular past tense forms, eg. "went", "did", "was"
- ❑ Uses speech which is easily understood 80% of the time

FOUR YEARS

Receptive Language
- ❑ Understands opposites, eg. "up - down", "black - white", "fat - thin"
- ❑ Understands the difference between past and present tense in stories
- ❑ Shows understanding of future events

Expressive Language
- ❑ Begins using "-ing" forms of verbs, eg. "running", "walking", "looking"
- ❑ Uses regular past tense forms, eg. "jumped"
- ❑ Uses the question forms "who", "what", "when", "why", "how"
- ❑ Changes word order appropriately to ask questions, eg. "Can I ...", "Is it..."
- ❑ Expresses future events with "going to", "have to", "want to"

FIVE YEARS

Receptive Language

- ❏ Can follow three commands in the right order, eg. "Get the book, bring it to the table, and sit down"
- ❏ Understands the materials that objects are made of (wood, plastic, glass)
- ❏ Understands "how many" up to four
- ❏ Notices when stories or pictures don't make sense

Expressive Language

- ❏ Begins using complex verb forms, eg. "can go", "will eat"
- ❏ Can tell a story about pictures
- ❏ Gives a connected account of recent events and experiences
- ❏ Uses complex sentences (joining two sentences with "and", "because", "but", "if", "so")
- ❏ Uses clear speech