

**Development of Sign Language**

**for Young Children**

**by**

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**A Grant Proposal  
Submitted in Partial Fulfillment of the  
Requirements for the  
Master of Science Degree  
in**

**Education**

**Approved: 2 Semester Credits**

A handwritten signature in cursive script, reading "Robert Peters", is written above a horizontal line.

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**ABSTRACT**

The Child and Family Study Center (CFSC) serves as a laboratory school and observation site for Early Childhood Education Majors and other related majors on campus. The center experience allows University students to link educational theory with practice and therefore must set the example for developmentally appropriate practices by modeling best practices. CFSC programs benefit teachers, parents, university students and children ages 6 months to 35 months.

Our nation depends on child care programs to care for their children. Programs vary in their content, but one of the aspects that is common to all is developing language and a form of communication. The problem is the lack of training for teachers and parents to help children communicate. All early

childhood teachers have a tremendous responsibility to understand the wants and needs of the children; which will help the children succeed in the program. Using sign language, you can take advantage of children's natural abilities to communicate sooner. The level of frustration that children feel diminishes significantly when a child can tell you what he or she wants. Tantrums are often caused by a toddler's inability to communicate needs or wants. Using sign language, you can communicate with children as early as 6 months and reduce the number of tantrums you encounter.

The objective of this project is to provide quality sign language training experiences for teachers and parents. The goal is to better prepare teachers and parents to communicate with their children at a young age.

- *Objective 1:* Provide teacher training that focuses on sign language skills and how to effectively teach young children to use sign language.
- *Objective 2:* Provide parent seminars that focus on sign language skills and how to use those skills at home with their children.
- *Objective 3:* To update and create classroom materials that provides an ideal learning environment for sign language.

The project outcomes are to enhance the skills of teachers and parents of the CFSC. Teachers and parents that have sign language training and the tools to use will be able to promote student learning and development.

Identifying and implementing best practices for teaching and learning sign language is the strategy that will be used. During the granting year, Lindsay Barnhart, CFSC Instructional Specialist, will coordinate teacher and parent

training seminars with a sign language expert, and update curriculum and classroom materials that will foster sign language development for young children.

This project represents a cost effective approach, with a budget request of \$5,853.08, to prepare current and future teachers and parents of young children. Updated classroom materials will promote sign language in the classrooms. Curriculum enhancements will be adapted to center policies and goals. A study over five years will be done on what teachers, parents and the children have learned. No additional funding will be necessary to complete this project.

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## Literature Review

Sign language is the use of a hand shape, movement and placement to represent a word or concept. Fingerspelling is the use of hand positions to represent letters of the alphabet (Edmunds and Krupinski, 2006). The use of signs to help hearing children learn dates back to the nineteenth century. Thomas Hopkins pioneered education for deaf people in the United States and advocated the use of signs to help increase vocabulary and language development in hearing children (Daniels, 1996). In 1852 David Bartlett taught deaf children and their hearing siblings in a family school. He found that not only did the sign language and fingerspelling help the deaf children, but it also helped their hearing siblings as well. Throughout the nineteenth century other educators of the hearing impaired recommended the use of sign language with hearing children to help teach reading, spelling and writing. Then, during the early part of the twentieth century sign language was not used with hearing children as well as with the hearing impaired. Society did not accept Sign language as an independent language. Sign language was again accepted as an independent language late in the twentieth century.

Using sign language with young children helps increase their vocabulary and language proficiency (Daniels, 1996). Sign language also provides a means of communication for young children that have not developed an oral language yet (©Meyer, 2005). Using sign language with children provides another sensory experience to enhance a richer language base. Sign language allows children to

actually feel language. Early acquisition of sign language has contributed to the fact that children use both motor ability and visual perception. Sign language uses both sides of the brain; the visual aspect of sign is received in the right hemisphere and is then processed in the left hemisphere. The native English language is stored separately from sign language, so it provides two different sources for children to retrieve information from and it also helps retain language. Daniels studied four pre-kindergarten classes; two of the classes received sign instruction and the other two classes received traditional instruction. Within the class the signing was being used by the teacher simultaneously along with spoken English. The Peabody Picture Vocabulary Test was given to all four classes the first week of school; the test results were virtually identical. The next test was given when the students were in kindergarten. There was a large difference, 10.76 points increase, between the students that received sign instruction and the students that did not. Students receiving sign instruction increased their test scores by 17.24 points which reflects their receptive vocabulary. The vocabulary gains that the pre-kindergarten students received with sign instruction was sustained throughout their kindergarten year. From this information a hypothesis was formed that there would be no vocabulary decay over time. The addition of sign language instruction in their pre-kindergarten curriculum made a dramatic increase in these students' vocabulary. The improvement occurred during the time of the sign intervention and was maintained by the students throughout the kindergarten year that followed (Daniels, 1996).



Teaching sign language to hearing children can improve their learning 5 skills. Sign language can improve their English vocabulary, speaking proficiency, reading ability, self-esteem and comfort expressing emotions. Using sign language builds synapses in both sides of the brain and the increase in synapses increases overall learning ability (Stone, 2001). Using English and sign language together in teaching and learning provides a richer language base for brain activity, growth and development. M. Daniels, the author of the book, "Dancing with Words: Signing for Hearing Children's Literacy," was interviewed by The Block Island Times (Stone, 2001). Within the article Daniels explains:

As a result of the way the human brain stores all languages, the young student learning a new language has two places to look for the information. Even in the initial days of sign language instruction, the separate memory store where the child can locate answers exists. It is a new storehouse for information providing youngsters with an additional data base that they can access easily and quickly. If they did not find it in their English data base, they may find it in their American Sign Language (ASL) data base. (p. 2)

American Sign Language uses the eyes much more than the spoken English language. The eyes develop sooner in young children and when you take in information with your eyes you are using the right brain (Snoddon, 2000). All languages are stored in the left brain, but when signs are used, both sides of the brain are being used. Teaching children sign language also gives them a jump start on bilingual education. Marilyn Daniels (2000, pg.1) states, "In the United

States, ASL is accepted and fulfils high school foreign language requirements in many states and in most colleges and universities.”

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Sign language does not hinder language development, it helps foster it. Sign language is not only used to enhance reading or spelling; it is used in all subject areas to help support the content by defining concepts and it also aids in memory of those concepts. Learning disabled elementary students participated in an experimental project using finger spelling to help them improve their spelling words. The children learned to read and fingerspell most of their spelling words after three ten minute periods (Vernon, 1980). Wilson, Teague and Teague (1985) conducted a study with seven regular first graders. They all spelled only 25% to 46% of their words correctly. When the students used both finger spelling and sign language to learn their spelling words, their scores went up to 56% to 90% of words spelled correctly. At the end of the study, the students' retention of the spelling words ranged from 60% to 90% of the words spelled correctly. Using signs with spoken words makes connections between objects and its labels. Signs teach the power of language; after children learn and use a few signs they are more eager to use spoken words (Sign Language for Hearing Children, 2006). These studies show that students of all ages can benefit from signing and finger spelling, even students with learning disabilities. Signs can be a highly effective teaching tool for students who do not respond to traditional methods. Using sign language in the classroom adds a kinesthetic dimension to learning. Students enjoy the physical involvement that signing brings.

Studies have been performed at the University of California by researchers Linda Acredolo and Susan Goodwyn. They have indicated that children who sign understand more words, have larger vocabularies and score higher on intelligence tests. Signing children also engage in more sophisticated play. A study that was published in the *Journal of Non-Verbal Behavior* noted that parents had less frustration, experienced more communication, and the children had an increased interest in books and an enriched parent-infant relationship. The researchers revisited the children from the study and found that the children's IQ scores were on average 12 points higher than non-signing babies. Acredolo and Goodwyn (2000) have found that babies can begin signing back when they can begin sitting on their own. This is long before they have developed the ability to speak. Between 7 and 12 months children's babbling begins to change; they are adding more consonants and vowel sounds. They are beginning to say their first words, but are not very clear. As children turn one and as the months pass toward the age of two, they begin to gain a larger vocabulary that is becoming much clearer. Children's language continues to develop rapidly after the age of two (Bowen, 1998).

Teaching infants and toddlers American Sign Language will help decrease the amount of frustration children may experience as they become more aware of their needs (©Meyer, 2005). Infants and toddlers have many needs that they are aware of before they are able to verbally communicate. When children try to express and those needs are not able to be met efficiently it can be a great source of frustration. The motor areas of the body mature sooner than the mouth and

other language articulators, so it is easier for children to learn and remember signs than it is for them to acquire fluency in spoken or written language (Snoddon, 8 2000). “Knowing which signs to use to communicate a need effectively has been demonstrated to reduce frustration and the crying/whining that can accompany it,” explains Denise Meyer (2005, pg. 1). Children that are younger than six or seven months do not have the memory capacity to actually remember the signs that are being modeled, but it is good none the less to give children extra exposure. If modeling of signs begins before six months the child may start signing back as soon as seven or eight months. This is much earlier than the child will have the ability to speak (©Meyer, 2005). School age children enjoy learning signs that symbolize objects and activities in their lives; it is never too late to start signing with a child. Some research does indicate that children who learn how to communicate with signs as babies may have higher verbal, reading and writing skills later in childhood than non-signing children (©Meyer, 2005).

Benefits of signing with children can continue after children become verbal. Children who learn American Sign Language can improve English vocabulary, understanding of concepts, number recognition, reading and spelling skills and have a better ability to express emotions (Sign Language Enriches Learning for Hearing Children, 2006).

Howard Gardner’s multiple intelligences research has helped teachers identify all the types of learning styles they may face with students in their classrooms. Teachers find that the use of sign language and fingerspelling will accommodate to a wide range of learning styles. A ‘verbal linguistic’ child loves

the process of learning another language. A 'kinesthetic' child is motivated naturally by movement. The 'interpersonal' child loves being involved in a group activity. The benefit of using this system is the representation of information through seeing, hearing, and movement (Edmunds and Krupinski, 2006). 9

Children with weak oral language skills tend to struggle with the reading process. The young child, who has fewer opportunities for oral language development such as an English Language Learner, will benefit from the visual images that sign language provides. Sign language draws a picture in the air illustrating the meaning of a word (Edmunds and Krupinski, 2006). These visual illustrations provide visual clues to the contextual meanings which will help acquire the concepts more quickly. Using multiple modalities helps the development of oral language development. When a teacher signs and says a word, the student sees and hears the word and when the student signs and says the word, the student is imprinting the word through auditory and kinesthetic means. Print knowledge begins with learning the alphabet and students are able to learn the alphabet through signing. The combination of fingerspelling and saying the letter names takes confusion out of the alphabet (Edmunds and Krupinski, 2006). When you say 'duh-bul-you' students may think it is more than one letter. When you pair the letter name with the sign that confusion is taken away. Fingerspelling also provides hand shapes for letters that are confusing such as c and z or reversal letters such as b and d (Edmunds, M. and Krupinski, D. 2006).

## Problem Statement

According to the National Center for Education Statistics (2001), there are over twenty-one million children under the age of six in center-based child care programs in the United States. Programs vary in their content, but one of the aspects common to all is developing language and a form of communication. All early childhood teachers have a tremendous responsibility to understand the wants and needs of the children; which will help the children succeed in the program.

Using sign language, can take advantage of children's natural abilities to communicate sooner. The level of frustration that children feel diminishes significantly when a child can tell you what he or she wants. Tantrums are often caused by a toddler's inability to communicate needs or wants. Using sign language, can communicate with children as early as 6 months and reduce the number of tantrums encountered. The earlier any child is exposed to and begins to acquire language, the better that child's communication skills will become. Research suggests that the first six months are the most crucial to a child's development of language skills. Teaching children sign language can start at the age of 6 and 9 months when the child starts interacting (Cadjan, 2005).

All young children use their hands naturally in an attempt to communicate before they can speak. The problem is the number of signs that young children can do on their own is limited. Help from teachers and parents is needed for children to develop a larger sign vocabulary.

The Child and Family Study Center serves as a laboratory school and observation site for Early Childhood Education Majors and other related majors on campus. The center experience allows University students to link educational theory with practice and therefore must set the example for developmentally appropriate practices by modeling best practices (CFSC, 2005). The Child and Family Study Center staff members need training and updating to be as knowledgeable as they can be in American Sign Language in order for high quality programming, teaching and learning to occur. Also, classrooms in the CFSC need to provide materials that support American Sign Language.

To help the children of the center develop sign language, training for the staff members would be a top priority. The staff needs to know how to perform sign language as well as teach the children of the center how to do it. There would also be a seminar for parents to attend. This seminar would teach the parents sign language and also how to teach their children sign language. It is very important to have the parents involved in the seminar for the children to have use of it at home as well as at the center. Children at a young age learn from repetition and it will also help them communicate at home. The center will also need books and a print rich environment with sign language. It is important for the children to see sign language around the room. Posters hanging in the room and books on the bookshelves will not only foster sign language for the children, but it will help new people that come in the room learn and understand what the children are saying or asking for. Training and seminars for staff and parents is key to helping children develop sign language skills.

## Benefits and Significance

The Child and Family Study Center helps promote language skills; speaking and listening. To help promote language in the younger children sign language will be used. Benefits of the children using sign language are:

- Signing allows infants and toddlers to clearly communicate specific thoughts
- Signing reduces frustration for the children and the teachers, because it increases communication
- Signing provides a window into the children's mind
- Signing won't delay verbal language development - in fact, it may accelerate it. Research shows that infants and toddlers who sign usually start to talk sooner and develop larger vocabularies than non-signing babies
- Signing reinforces verbal language by adding visual and kinesthetic emphasis to auditory input
- Signing children tend to be more interested in books
- Signing builds on children's natural tendencies to use gestures.

The project will benefit the teachers and parents of the Child and Family Study Center by providing:

- Valuable teacher training that addresses sign language skills and strategies for using sign language in an early childhood classroom



- Classroom materials, such as books and posters, that help create the ideal learning environment
- Valuable parent seminar that addresses sign language skills for the parents and how to use those skills at home with the children.

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The teachers will obtain insight and training on sign language strategies to teach signing and the use of classroom materials to produce an ideal learning environment. The parents will gain knowledge about sign language and gain signing skills. They will also learn how to use sign language with their children at home.

### Goals and Objectives

Goal 1: Provide teacher training that focuses on sign language skills and how to effectively teach young children to use sign language.

Objective 1: To provide teacher workshops highlighting the American Sign Language for infants and toddlers and strategies for using it in the classroom.

Objective 2: To create a questionnaire to determine whether or not the needs of the teachers are being met with the workshop.

Goal 2: Provide parent seminars that focus on sign language skills and how to use those skills at home with their children.

Objective 1: To provide a parent seminar highlighting American Sign Language for infants and toddlers and strategies for using it at home.

- Objective 2: To create a questionnaire to determine the needs of parents and how sign language is affecting the lives of their children and themselves at home.
- Goal 3: To update and create classroom materials that provides an ideal learning environment for sign language.
- Objective 1: To integrate materials in the learning environment and curriculum for the teachers so that young children can develop sign language skills.
- Objective 2: To develop a questionnaire to determine if the classroom materials are fostering sign language development and if curriculum needs are being meet.
- Goal 4: To assess teacher's, parent's and children's growth.
- Objective 1: To collect evaluation forms from the year and tabulating results.
- Objective 2: To tabulate results from evaluations from both parents and teachers.
- Objective 3: To assess children's learning and growth through checklists and anecdotal records.
- Objective 4: To compare results from each year.

## Timeline

The timeline refers to the goal and activity matrix that follows.

Table 1

### Timeline Year 1

Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
G1 A1	G3 A2	G1 A2			G4 A1						
G1 A1.1		G2 A2	G2 A2								
G2 A1		G3 A3									
G3 A1											

G1 A1: 1 day

G1 A1.1: 2-3 days

G2 A1: 3 days

G3 A1: 2-3 days for ordering, 3 days for distributing

G3 A2: 1 day

G1 A2: 1 day

G2 A2: 1 day

G3 A3: A week

G4 A1: 2 weeks

Table 2

## Timeline Year 2

Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
G1 A1.1	G3 A2	G1 A2			G4 A1						
G2 A1		G2 A2	G2 A2								
G3 A1		G3 A3									

G1 A1.1: 2-3 days

G2 A1: 3 days

G3 A1: 2-3 days for ordering, 3 days for distributing

G3 A2: 1 day

G1 A2: 1 day

G2 A2: 1 day

G3 A3: A week

G4 A1: 2 weeks

Table 3

## Timeline Year 3

Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
G1 A1.1	G3 A2	G1 A2			G4 A1						
G2 A1		G2 A2	G2 A2								
G3 A1		G3 A3									

G1 A1.1: 2-3 days

G2 A1: 3 days

G3 A1: 2-3 days for ordering, 3 days for distributing

G3 A2: 1 day

G1 A2: 1 day

G2 A2: 1 day

G3 A3: A week

G4 A1: 2 weeks

Table 4

## Timeline Year 4

Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
G1 A1.1	G3 A2	G1 A2			G4 A1						
G2 A1		G2 A2	G2 A2								
G3 A1		G3 A3									

G1 A1.1: 2-3 days

G2 A1: 3 days

G3 A1: 2-3 days for ordering, 3 days for distributing

G3 A2: 1 day

G1 A2: 1 day

G2 A2: 1 day

G3 A3: A week

G4 A1: 2 weeks

Table 5

## Timeline Year 5

Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
G1 A1.1	G3 A2	G1 A2			G4 A1	G4 A2	G4 A4				
G2 A1		G2 A2	G2 A2			G4 A3	G4 A5				
G3 A1		G3 A3									

G1 A1.1: 2-3 days

G2 A1: 3 days

G3 A1: 2-3 days for ordering, 3 days for distributing

G3 A2: 1 day

G1 A2: 1 day

G2 A2: 1 day

G3 A3: A week

G4 A1: 2 weeks

G4 A2: 2 weeks

G4 A3: 2 weeks

G4 A4: 3 weeks

G4 A5: 1 week

Table 6

## Timeline Matrix

Activity	Persons Involved	Date	Expected Outcome
Goal 1 Activity 1 Setup and organize all goals and objectives Activity 1.1 Prepare for teacher training (contact speaker, set date and time, reserve room for workshop)	Lindsay Barnhart	Year 1 January  Every January 2007-2011	Flyers, handouts
Goal 1 Activity 2 Get refreshments Workshop for teacher training	6 teachers of the CFSC Infant/Toddler Lab	Every March 2008-2012	Implementation of sign language using grant materials and resources
Goal 2 Activity 1 Prepare for parent seminar (contact speaker, set date and time, reserve room for seminar)	Lindsay Barnhart	Every January 2007-2011	Flyers, handouts
Goal 2 Activity 2 Get Refreshments Seminar for parents	All parents that are able to attend of the CFSC Infant/Toddler Lab	Every March and April 2008-2012	Implementation of sign language at home with children
Goal 3 Activity 1 Order classroom materials and	Lindsay Barnhart	January 2007 -as needed	Materials ordered and distributed to classrooms



distribute materials to classrooms upon arrival		through the next 4 years	
Goal 3 Activity 2  Prepare and distribute list of new classroom materials	Lindsay Barnhart	February 2007 -as needed through the next 4 years	List of new classroom materials prepared and distributed to classroom teachers
Goal 3 Activity 3  Creating and updating classroom spaces	6 teachers of the CFSC Infant/Toddler Lab	March 2008 -as needed through the next 4 years	Materials integrated into the classroom through the use of displays and books
Goal 4 Activity 1  Gather results from the years evaluation	Lindsay Barnhart	Every June	
Goal 4 Activity 2  Gather results from each years evaluation	Lindsay Barnhart	Year 5 July	
Goal 4 Activity 3  Tabulate the results of evaluations from the parents and teachers	Lindsay Barnhart	Year 5 July	
Goal 4 Activity 4  Assess children's learning and growth through	Lindsay Barnhart	Year 5 August	

checklists and anecdotal records and tabulate results			
Goal 4 Activity 5  Compare results from each year	Lindsay Barnhart	Year 5 August	

## Budget

Table 7

## Budget Year 1

Personnel	
Sign Language Instructor Fee (parent seminar) \$250.00/day for 2 hours x 2	\$500.00
Sign Language Instructor Fee (teacher training) \$250.00/day for 2 hours	\$250.00
<i>Total</i>	<i>\$750.00</i>
Services and Supplies	
Project Supplies:	
Color Copies (posters and brochures)	\$24.18
Room Reservation	\$0
Computer	\$0
Refreshments (water, juice, cheese, crackers)	\$51.92
<i>Total</i>	<i>\$76.10</i>
Classroom Materials	
Books \$6.49 x 9	\$58.41
Puzzles, etc.	\$30.89
Reference Poster \$5.99 x 3	\$17.97
Classroom Kit	\$240.00
<i>Total</i>	<i>\$347.27</i>
Teacher Materials	
Parent Kit (to check out) \$34.99 x 2	\$69.98
Book and Reference Guide \$22.49 x 3	\$67.47
DVD Volumes I and II	\$37.90
Dictionary \$11.75 x 3	\$35.25
<i>Total</i>	<i>\$210.00</i>
<b>Total Project Cost</b>	<b>\$1383.37</b>

Table 8

## Budget Year 2

Personnel	
Sign Language Instructor Fee (parent seminar) \$260.00 for 2 hours x 2	\$520.00
Sign Language Instructor Fee (teacher training) \$260.00 for 2 hours	\$260.00
<i>Total</i>	<i>\$780.00</i>
Services and Supplies	
Project Supplies:	
Color Copies (posters and brochures)	\$24.18
Room Reservation	\$0
Computer	\$0
Refreshments (water, juice, cheese, crackers)	\$51.92
<i>Total</i>	<i>\$76.10</i>
Classroom Materials	
Books \$6.49 x 9	\$19.47
Puzzles, etc.	\$9.27
Reference Poster \$5.99 x 3	\$5.39
Classroom Kit	\$72.00
<i>Total</i>	<i>\$106.13</i>
Teacher Materials	
Parent Kit (to check out) \$34.99 x 2	\$34.99
Book and Reference Guide \$22.49 x 3	\$22.49
DVD Volumes I and II	\$37.90
Dictionary \$11.75 x 3	\$11.75
<i>Total</i>	<i>\$107.13</i>
<b>Total Project Cost</b>	<b>\$1069.36</b>

Table 9

## Budget Year 3

<b>Personnel</b>	
Sign Language Instructor Fee (parent seminar) \$270.40 for 2 hours x 2	\$540.80
Sign Language Instructor Fee (teacher training) \$270.40 for 2 hours	\$270.40
<i>Total</i>	<i>\$811.20</i>
<b>Services and Supplies</b>	
<b>Project Supplies:</b>	
Color Copies (posters and brochures)	\$24.18
Room Reservation	\$0
Computer	\$0
Refreshments (water, juice, cheese, crackers)	\$51.92
<i>Total</i>	<i>\$76.10</i>
<b>Classroom Materials</b>	
Books \$6.49 x 9	\$19.47
Puzzles, etc.	\$9.27
Reference Poster \$5.99 x 3	\$5.39
Classroom Kit	\$72.00
<i>Total</i>	<i>\$106.13</i>
<b>Teacher Materials</b>	
Parent Kit (to check out) \$34.99 x 2	\$34.99
Book and Reference Guide \$22.49 x 3	\$22.49
DVD Volumes I and II	\$37.90
Dictionary \$11.75 x 3	\$11.75
<i>Total</i>	<i>\$107.13</i>
<b>Total Project Cost</b>	
	<b>\$1100.56</b>

Table 10

## Budget Year 4

Personnel	
Sign Language Instructor Fee (parent seminar) \$281.22 for 2 hours x 2	\$562.44
Sign Language Instructor Fee (teacher training) \$281.22 for 2 hours	\$281.22
<i>Total</i>	<i>\$843.66</i>
Services and Supplies	
Project Supplies:	
Color Copies (posters and brochures)	\$24.18
Room Reservation	\$0
Computer	\$0
Refreshments (water, juice, cheese, crackers)	\$51.92
<i>Total</i>	<i>\$76.10</i>
Classroom Materials	
Books \$6.49 x 9	\$19.47
Puzzles, etc.	\$9.27
Reference Poster \$5.99 x 3	\$5.39
Classroom Kit	\$72.00
<i>Total</i>	<i>\$106.13</i>
Teacher Materials	
Parent Kit (to check out) \$34.99 x 2	\$34.99
Book and Reference Guide \$22.49 x 3	\$22.49
DVD Volumes I and II	\$37.90
Dictionary \$11.75 x 3	\$11.75
<i>Total</i>	<i>\$107.13</i>
<b>Total Project Cost</b>	<b>\$1133.02</b>

Table 11

## Budget Year 5

<b>Personnel</b>	
Sign Language Instructor Fee (parent seminar) \$292.47 for 2 hours x 2	\$584.94
Sign Language Instructor Fee (teacher training) \$292.47 for 2 hours	\$292.47
<i>Total</i>	<i>\$877.41</i>
<b>Services and Supplies</b>	
<b>Project Supplies:</b>	
Color Copies (posters and brochures)	\$24.18
Room Reservation	\$0
Computer	\$0
Refreshments (water, juice, cheese, crackers)	\$51.92
<i>Total</i>	<i>\$76.10</i>
<b>Classroom Materials</b>	
Books \$6.49 x 9	\$19.47
Puzzles, etc.	\$9.27
Reference Poster \$5.99 x 3	\$5.39
Classroom Kit	\$72.00
<i>Total</i>	<i>\$106.13</i>
<b>Teacher Materials</b>	
Parent Kit (to check out) \$34.99 x 2	\$34.99
Book and Reference Guide \$22.49 x 3	\$22.49
DVD Volumes I and II	\$37.90
Dictionary \$11.75 x 3	\$11.75
<i>Total</i>	<i>\$107.13</i>
<b>Total Project Cost</b>	
	<b>\$1166.77</b>

Table 12

## Budget Totals: Year 1-5

<b>Personnel</b>	
Sign Language Instructor Fee (parent seminar)	\$2708.18
Sign Language Instructor Fee (teacher training)	\$1354.09
<i>Total</i>	<i>\$4062.27</i>
<b>Services and Supplies</b>	
<b>Project Supplies:</b>	
Color Copies (posters and brochures)	\$120.90
Room Reservation	\$0
Computer	\$0
Refreshments (water, juice, cheese, crackers)	\$259.60
<i>Total</i>	<i>\$380.50</i>
<b>Classroom Materials</b>	
Books \$6.49 x 9	\$136.29
Puzzles, etc.	\$67.97
Reference Poster \$5.99 x 3	\$39.53
Classroom Kit	\$528.00
<i>Total</i>	<i>\$771.79</i>
<b>Teacher Materials</b>	
Parent Kit (to check out) \$34.99 x 2	\$209.94
Book and Reference Guide \$22.49 x 3	\$157.43
DVD Volumes I and II	\$189.50
Dictionary \$11.75 x 3	\$82.25
<i>Total</i>	<i>\$638.52</i>
<b>Total Project Cost</b>	
	<b>\$5853.08</b>



## Budget Narrative

### Year 1

Services and supplies will continue to be a small amount of the budget.

The number cost will stay the same through the five years. Color copies of posters will be made to hang on all the doors that enter into the center, as well as on bulletin boards. The posters will provide information about the parent seminar. There will also be color copies of brochures that will be sent home with each child with more detailed information about the seminar. There will also be brochures made for each of the teachers with information as a reminder for them. Black and white copies will be made of the surveys for both the teachers and parents as assessment. There will be no charge for the room reservation as it will be held in the home economics building at UW-Stout. There will also be no charge for a computer, because there are computers located in each of the rooms that would be used. The last portion of services and supplies are refreshments that will be at both the teacher training and parent seminar.

Personnel is the largest portion of the total budget. Denise Meyer, a well known instructor of sign language will be brought in for both the teacher training and parent seminar. As a part of this grant the parents will not have to pay to come to the seminar, so a large amount of the budget is put toward the conference fee for the parents. Denise will be coming two different times, once for the parents and once for the teachers. The seminars were separate because the information will be different for the parents and the teachers. A small part of the personnel is the conference fee for the teachers.

Classroom material is an important part of the budget. New materials will be bought to foster sign language in the classroom. Materials will be bought for each of the three rooms within the Infant/Toddler Lab. Different books will be bought for the children to look at to see the sign and a picture of what the sign is. There will also be puzzles and other interactive toys that will be purchased to foster sign language. Reference posters will be hung in each of the classrooms for the children, teachers, parents and other people that come into the classroom. A classroom kit will also be purchased with various materials; a bear that helps teach sign language, books and other interactive materials to go along with the signing bear.

Teacher materials are also an important part of the budget. Materials will be purchased for the three classrooms in the center. One portion of this part of the budget will be spent on a kit for the parents to use. Two of these kits will be purchased and the parents will have the opportunity to check these kits out to use at home for a period of time to help their children learn sign language at home. If they are not checked out by the parents the teachers can also use them. For each of the three rooms there will be a sign language book and reference guide and also an American Sign Language dictionary. There will also be two DVD volumes for the teachers to use to educate themselves and these materials can be used to educate new, incoming teachers.

## Years 2-5

Services and supplies are a small amount of the budget. The project supply cost will stay the same. The conference fee has a four percent increase each year as natural increases occur in seminar costs.

Personnel will continue to be largest portion of the total budget. Denise Meyer will continue doing the seminars for the teachers and parents. Natural increases in instructor fees were taken into account as four percent was added each year on to the instructor fees for this grant.

There is a 30% damage cycle of classroom materials. Thirty percent of the initial costs for replacing the classroom materials was included in the budget. The classroom kit will not be completely replaced if parts are damaged. Pieces can be replaced rather than the whole kit; which will be more cost effective. This was calculated for each year.

A 30% damage replacement was also calculated for teacher materials for each year. Materials will be purchased for the three classrooms in the center. A portion of the budget will continue to be spent on kits for the parents to use. It is important to have a number of kits for parents to have the ability to check out when needed. Each consecutive year one kit will be bought for the parents to use. The DVDs will also continue to be purchased each year as additional reference and teaching guides for the teachers. In the third year one there will be one set for each classroom. The DVDs can also be used for parent education and checkout materials for the parents.

## Evaluation Plan

This project will be evaluated with the use of questionnaires with both the teachers of the Child and Family Study Center and the parents. In February each year at a staff meeting the teachers of the Child and Family Study center will become aware of the new materials that are available for sign language and set final dates for the teacher training and parent seminars. The parents will then be notified by e-mail and signs hanging in the Infant/Toddler Lab announcing the seminars. At the end of each seminar the teachers and parents will be given a questionnaire. The questionnaires will be collected throughout May and the results will be gathered together in June. These questionnaires will determine whether:

- the classroom materials were useful and how they enhanced the development of sign language
- the strategies presented at the teacher training and parent seminars were effective in the classroom and at home and if they were viewed as effective by the parents and teachers
- more training, seminars or materials are needed to continue the development of sign language in the children of the center.

The children will be evaluated using anecdotal records and sign language developmental checklists. The anecdotal records will be used to record when children use sign language along with an explanation of what happened. The developmental checklists will show when the children learn words or letters of American Sign Language with a short comment explaining it. The anecdotal

records and developmental checklists will be stored in the children's portfolio as they grow through the program and will be filed away as they leave the program. They will be used to conduct the study looking at the children's growth through their time at the center.

### Evaluation Tool

The evaluation tool that will be used for this grant is questionnaires for both teachers and parents. The questionnaires will allow the project director to look at each area that is being worked on and see if the needs are being met and identify areas that need to be worked on.

#### **Sign Language Evaluation Teacher Questionnaire:**

Please answer yes or no to each question and add a comment to explain your answer.

\_\_\_\_\_ Teacher training was focused on sign language for hearing infants and toddlers

\_\_\_\_\_ Teacher training taught skills to teach young children sign language

\_\_\_\_\_ Classroom materials are being used and provide an ideal learning environment for sign language

\_\_\_\_\_ Teachers are able to communicate to the children more easily

\_\_\_\_\_ Children are beginning to be able to communicate their wants and needs through sign language, thus having less frustration

Any additional comments from teacher and parent surveys to be considered:

**Sign Language Evaluation Parent Questionnaire:**

Please answer yes or no to each question and add a comment to explain your answer.

\_\_\_\_\_ Parent seminar was focused on sign language for hearing infants and toddlers

\_\_\_\_\_ Parent seminar taught skills on how to use sign language at home with their children

\_\_\_\_\_ Parents are able to communicate with their children more easily

\_\_\_\_\_ Children are beginning to be able to communicate their wants and needs through sign language, thus having less frustration

Any additional comments from teacher and parent surveys to be considered:

### Anecdotal Record for Children

Child's Name: \_\_\_\_\_

Child's Birthdate: \_\_\_\_\_

\_\_\_\_\_ Performed on his/her own

\_\_\_\_\_ Performed with  
spoken language

\_\_\_\_\_ Performed with teacher guidance

\_\_\_\_\_ Performed without  
spoken language

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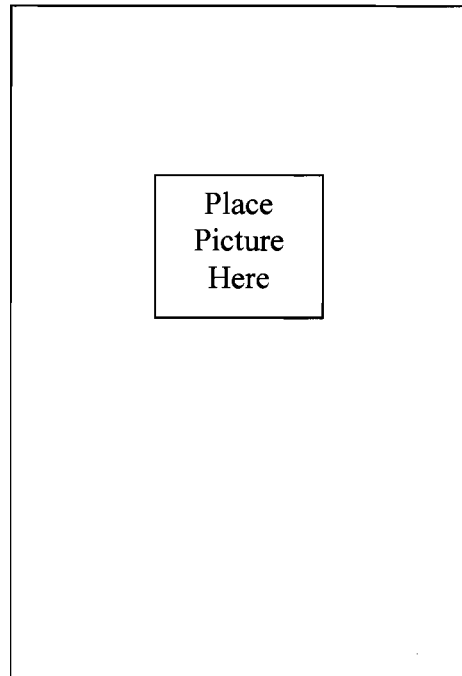
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(Short narrative about what the child did.)

(These anecdotal records and the following checklist will be kept in the child's portfolio as the child grows through the program and as the project director continues to work on the study. When the child leaves the center the information will be filed away.)

## Checklist for Children

Sign Language Developmental Checklist	Date Observed and Observers Initials	Comments
More		
Please		
Thank You		
Milk		
Water		
Change		
Eat		
Drink		
Mother		
Father		
Help		
Blanket		
Letter A		
Letter B		
Letter C		
Letter D		
Letter E		
Letter F		
Letter G		
Letter H		
Letter I		
Letter J		
Letter K		
Letter L		
Letter M		
Letter N		
Letter O		
Letter P		
Letter Q		
Letter R		
Letter S		
Letter T		
Letter U		
Letter V		
Letter W		
Letter X		
Letter Y		
Letter Z		

(More words can be added to the list as you begin teaching more words and as children begin learning more.)



### Dissemination Plan

The results from both the parent and teacher questionnaires will be presented at a staff meeting in every May. There will be time at this meeting to discuss the results and to formulate a plan for future action. Because communication between children and adults is important, teacher implementation, parent implementation and children's progress will be assessed every semester. Therefore, at a staff meeting near the end of each semester, the staff will discuss ongoing effects of sign language to foster communication. The effectiveness of training, curriculum resources and classroom materials will also be discussed along with goal setting for the teachers, parents and children. During professional development week every August the results from year to year will be presented to the staff. An article will be submitted to *Early Childhood Today* for publication of the topic of sign language in the early childhood classroom.

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