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Lesson 1 – Language Acquisition and Development of Children who are Deaf

Introduction

Your foundation of typical child and language development provided you the foundation to delve further into language acquisition and cognition of children who are deaf or hard of hearing. This lesson focuses on the acquisition and development of language of children who are deaf or hard of hearing. Early babbling (vocal/manual) to first words/signs are studied. In addition, you will look at three diverse communication approaches: oral, manually coded English, and American Sign Language. When reading about the various approaches it is important to consider what you already know about normal language development.

Overall Plan

You will start by reading Richard Meier’s article about “Language acquisition by Deaf Children” which gives an overview of some of the issues and introduces the concept of deaf children as bilingual.

Then you will start to explore the idea of what a deaf child’s first language is or should be and what it means to be a “bilingual/bicultural” person.
### Lesson 1 Roadmap

**Lesson 1 - Language Acquisition of Children who are Deaf**

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<tbody>
<tr>
<td>1.1</td>
<td>Course check in – WebCT</td>
</tr>
<tr>
<td>1.2</td>
<td>Reading #1, “Language Acquisition by Deaf Children”</td>
</tr>
</tbody>
</table>
| 1.3 | Web Activity:  
   “First Language: Sign or Speech”  
   [http://clerccenter.gallaudet.edu/Products/Sharing-Ideas/afirst/critspoken.html](http://clerccenter.gallaudet.edu/Products/Sharing-Ideas/afirst/critspoken.html)  
   “Sign Language as a First Language”  
   [http://iascl.uia.ac.be/iascl/bulletinV20N2.pdf](http://iascl.uia.ac.be/iascl/bulletinV20N2.pdf) (article on pages 4-6) |
| 1.4 | Reading #2: “The Bilingual and Bicultural Person ...” |
| 1.5 | Reading #3: “Incorporating Strategies of 2nd language learning” |
| 1.6 | WebCT Discussion  
   Post response to readings. |
Activity 1.1 - WebCT Introduction

Check in on WebCT

Purpose

The purpose of this activity is to make sure that you can access EDI 112 in WebCT and see all the discussion groups.

What to Look For

In the discussion for Activity 1.1, post a comment on one of these topics:

- What do you think the biggest challenge is for hearing parents of deaf children?
- If you know any people in the following situations, comment on the language choice and anything you might know about the language development of the child:
  - deaf children of deaf parents
  - deaf children of hearing parents using ASL, SEE II or any other language choice
  - a deaf child of hearing parents whose hearing loss was not detected early

Also, look at the posting in Main that describes which discussion groups should be in your list of discussions. Notify your Section Facilitator if you do not see all the appropriate groups.
Activity 1.2 - Reading #1

“Language Acquisition in Deaf Children” pp. 145-157
by Richard P. Meier

Purpose

Meier (1991) discusses four factors that differentiate linguistic experiences of children who are deaf from those who are hearing. In addition, Meier reviews evidence that suggests that principles of learning spoken language hold true for acquiring a sign language. Finally, the importance of a language rich environmental is examined. This supports your study in EDI 111 regarding the impact of heredity in combination with the environment, and culture on language development.

What to Look For

- How linguistic experiences effect vocabulary, word order, and morphology.
- Basic elements of the linguistic environment of children who are deaf.
- The linguistic environment of children who are born deaf of deaf parents.
Activity 1.3 – Web Activity

“First Language: Sign or Speech”
http://clerccenter.gallaudet.edu/Products/Sharing-Ideas/afirst/critspoken.html

“Sign Language as a First Language”
http://iascl.uia.ac.be/iascl/bulletinV20N2.pdf
(article on pages 4-6)

Purpose

The purpose of this activity is to review some of the basic ideas about “wiring of the brain” and introduce the difference between natural language acquisition and language learning.

What to Look For

Look for the following at the websites:

At http://clerccenter.gallaudet.edu/Products/Sharing-Ideas/afirst/critspoken.html look for:

- The critical period
- Definition of language acquisition
- Definition of language learning
- The importance of access to learning a spoken language
- The complexity of teaching speech to children without access to it

At http://iascl.uia.ac.be/iascl/bulletinV20N2.pdf look for:

- Only 5-10% of deaf children are born to deaf parents and can acquire sign language naturally as their first language
- The language background of deaf children varies greatly, which is reflected in the wide variety of language skills of the deaf population (more on this in the Ogden article).
- “Only if deaf children acquire a first language, in their case sign language, will they be able to learn a second language, be it spoken or written.
Activity 1.4 - Reading #2

“The bilingual and bicultural person in the hearing and deaf world”

Purpose

This is an in-depth look at the bilingual/bicultural Deaf person. You often think of yourself, as a professional interpreter, as the bilingual/bicultural mediator. But rarely do you realize just how bilingual/bicultural Deaf people are in their everyday lives.

What to Look For

Look for these points in the reading.

- Similarities between Deaf bilinguals and hearing bilinguals
- What is unique about Deaf bilinguals?
- The importance of Deaf children be brought up bilingual with sign language as the primary language and the spoken language of their country (especially in written form) as a second language.
- The definition of “bicultural” and how Deaf people fit the definition.

Think about these questions relating to a person’s first language (L1) and second language (L2):

- If the L1 really establishes a foundation for the L2, does that mean the L2 will never be “better” than the L1?
- How well can a person learn/acquire an L2 if he/she doesn’t have a strong foundation in L1 upon which to build?
Activity 1.5 – Reading #3

“Incorporating Strategies of 2nd Language Learning” by Barbara Schirmer, pgs. 86-104

Purpose

Teachers of children who are deaf must be able to create a classroom environment rich in opportunities for each child to develop the forms, meanings, and uses of language in face-to-face communication. This means that the teacher must be able to concurrently accommodate both language development goals and academic goals. As members of the educational team, interpreters contribute to the overall effectiveness of what transpires in a classroom with deaf and hard-of-hearing children. Understanding and appreciating the various issues involved in bilingual education for deaf and hard-of-hearing children will enhance your performance as an interpreter because it will help to identify strategies that promote bilingual competence and success.

What to Look For

Look for these key points in the reading:

• Factors in the development of bilingual proficiency.
• Considerations and perspectives on bilingual education.
• Bilingualism and cognitive development.
• The relationship between language and culture.
• Models of bilingual education.
• Issues related to bilingualism and the education of children who are deaf and hard-of-hearing.
• Prospects for using a bilingual approach to educating children who are deaf and hard-of-hearing.
Insights

Part I: Language Acquisition vs. Learning

It is necessary for us to differentiate between two critical terms/concepts, language acquisition and language learning.

One accepted definition of language acquisition is: the unconscious process of generating language input/output from the accessible environment. It does not require overt adult “teaching” for a child to process information from environmental cues. A first language (L1) is acquired this way, in a natural setting, from those present in the child’s environment. Vygotsky (you remember him? he is my hero!!) saw the acquisition of L1 as the “free, spontaneous use of speech [and signs] and then later, the conscious realization of the linguistic forms” (John-Steiner 1985, p. 350).

- We ACQUIRE our L1 in a natural way.
- We are not consciously aware of acquiring our L1.
- We are exposed to our L1 in a natural environment and we see/hear people using that L1 to talk about all kinds of things.
- We are exposed to numerous other people who are already quite proficient at using that L1 (parents, siblings, family members, neighbors).
- We do not think about “rules” and the right/wrong way of expressing ourselves in our L1.
- It’s not until we go to first grade (after 6+ years of receiving information in our L1 and 4-5 years of expressing ourselves in our L1) that we begin to become aware of our language skills, and even then, it’s minimal; later, as we progress in school, we study English and learn the “rules” for “appropriate” use of the language (this comes along when we learn to read and write).

Language learning is different from language acquisition. Learning is defined as the active, conscious adjustment of knowledge received from the intentional efforts of external sources. By external sources, we can mean classrooms, books, teaching, etc.

That sounds a lot different from acquisition! Often, we use the word learning when we discuss second/foreign language (L2) and use the word acquisition when we discuss first language (L1).

Now, this is not one hundred percent, because some individuals can acquire an L2 by spending their Junior year of college in Paris, or by spending three summer months in Mexico; it is very possible for that individual to acquire a second language. But, if we talk about the classroom, in a formal learning situation, we usually do not say an
individual acquired his/her L2. (In fact, what we usually say is he/she “studied a foreign language,” don’t we?)

<table>
<thead>
<tr>
<th>Acquisition</th>
<th>Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>free, spontaneous</td>
<td>conscious</td>
</tr>
<tr>
<td>natural environment</td>
<td>classroom</td>
</tr>
<tr>
<td>No attention to “rules”</td>
<td>often very aware of “rules”</td>
</tr>
<tr>
<td>other L1 users in the environment</td>
<td>often only the teacher speaks the L2</td>
</tr>
<tr>
<td>numerous opportunities to use</td>
<td>often, opportunities for using this new L1 language are limited to the classroom</td>
</tr>
<tr>
<td>input includes many naturally occurring topics</td>
<td>often, input is stilted and contrived</td>
</tr>
</tbody>
</table>

**Part II Bilingualism and Interdependence**

Vygotsky also had some views on L2 learning. He said a child has a command of the structure of his/her native language and that how well he/she acquires an L2 depends on the level of development in his/her L1 (John-Steiner 1985, p. 350). Stop and think about this a minute. The conscious and deliberate acquisition (notice, he did not say learning) of L2 depends upon what one has already acquired in L1. What one already knows in L1 supports the acquisition process of the L2.

Quite a bit of research has been done to support this hypothesis (for example: Johansson 1976, Ringbom 1987, Chihara et al 1989, Olshtain et al 1990, Monikowski 1996), in numerous languages. In fact Olshtain et al (1990, p. 38) very clearly stated that the “most important conclusion” to be drawn from their research was:

Academic proficiency in one’s mother tongue seems to play a very important role in predicting students’ success [in foreign language learning] within a school situation. Even when such proficiency is measured by the teacher’s grade, knowledge of L1 is a powerful predictor.

We’ll be talking more about “academic proficiency” in the future, as well as look at interdependence a bit more. For now, I want you to THINK about this for a minute. Think about how important a strong L1 is, for all of us. Research has proven, time and again, that one needs a foundation in L1 if one is to successfully acquire/learn an L2.
Activity 1.6 – WebCT Discussion

WebCT Discussion on Lesson 1 Readings

Purpose

The purpose of this activity is to share information and insights with your peers and to learn from each other. You have read 3 articles and explored various web sites that discuss language acquisition by deaf children, the critical period of language acquisition and bilingualism. Reflect on what you have learned and what it means to you, the student for whom you interpret and parents of deaf children.

What to Look For

Consider these questions or make an original posting in the discussion group for this activity:

• What is more important for a deaf or hard of hearing child - early acquisition of sign language or early acquisition of spoken language? Why do you say this?

• Think about the Deaf children you know. Are they "bilingual/bicultural"? Can you give specific examples of their situation/behavior that support this concept?

• Think about the L1 (first language), L2 (second language) of Deaf children. Do you think the L2 will never be "better" than the L1? If so, what implications does that have for the child for whom you interpret? What implications does it have for you as an interpreter?

• Do you know any students who may have been exposed to any of the methods (oral/aural, manually coded english, etc.) that encourage the development of English as a first language? If so, describe their background and what effect this experience had on their life at school.

• How have these readings helped you to understand the difficulties/challenges faced by the student for whom you interpret?
Lesson 1 Summary

Conclusion

In EDI 111: Child and Language Development, you studied early language acquisition and development. The acquisition was accomplished in a relatively short period of time with no seemingly no effort on the part of the infant. However, if you add hearing loss and the fact that 90% of children who are deaf have hearing parents to the equation, the overall picture changes.

In Lesson 1 you began to explore language acquisition and development of children who are deaf and the concept of deaf children as “bilingual”.

You saw that children who are exposed to a language rich environment, be it English or ASL, will ultimately become fluent users of the language and that a hearing child’s first words occur within the same time frame of a deaf child’s first signs. There are those who would argue that signs occur earlier!

Key Points

Remember these key points from this lesson:

- Sign Language does not impede spoken language.
- Children exposed to a language rich environment, be it ASL or English, will ultimately become fluent users of the language.
- Language development of deaf children learning ASL is comparable to their hearing peers learning English.
- No single communication approach has proven adequate for all deaf children.
- Deaf children grow up bilingual with sign language as their first language and the spoken language of their country as a second language (usually written).
What’s Next?

Dr. Brenda Schick will share her research on the acquisition of American Sign Language by children who are deaf of deaf parents. Look for the following:

- The importance of age of early identification.
- ASL development is parallel to spoken language development.
- The importance of a rich, complete, and natural signing environment.
- The linguistic components of ASL: syntax, semantics, morphology and phonology.
Lesson 2 - Acquisition of ASL

Introduction

This segment of the course begins with the reading of an article that reviews and summarizes the acquisition processes. You will then view Dr. Schick’s videotape discussing the acquisition of ASL as a first language. Her work is with deaf children who are acquiring ASL from their parents, in a natural setting (much like the majority of you acquired English). Approximately 10% of the Deaf children in this country have Deaf parents, which means approximately 10% of the Deaf children in this country have access to ASL as a first language.

Overall Plan

Begin by reading the article that summarizes the process of language acquisition. Review your notes from EDI 111: Child and Language Development. Keep in mind the differences between acquiring and learning a language and the differences between a language and a system. Sit back and watch Dr. Schick’s videotape. You may want to watch the videotape several times. It is rich with state-of-the-art information. While viewing the tape consider the other 90% of Deaf children, who as infants and toddlers do not have access to language models. For the most part these are the students for whom educational interpreters interpret.

Lesson Map

Lesson 2 - Acquisition of American Sign Language

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<tbody>
<tr>
<td>2.1</td>
<td>Textbook: Raising and Educating a Deaf Child, Chapter 5, “Language Development”</td>
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<tr>
<td>2.2</td>
<td>Videotape, Segment 1 - “Acquisition of ASL” Reading #4: “The Development of ASL: An Overview for Educational Interpreters”, presentation notes</td>
</tr>
<tr>
<td>2.3</td>
<td>Reading #5: “The silent garden: Raising your deaf child.”</td>
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<tr>
<td></td>
<td>Assignment 1: Develop a profile of the student for whom you interpret.</td>
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</tbody>
</table>
Activity 2.1 – Reading #4

Textbook: Raising and Educating a Deaf Child, Chapter 5, “Language Development”.

Purpose

Marschark (1997) explores the basic question: How do deaf children learn language and do they learn in the same manner as their hearing peers? Having read pages 87-108, could you now answer those same questions? Maybe you are still formulating your own opinions.

What to Look For

Look for these key points in the reading:

- The acquisition of sign language for deaf children who have early exposure to American Sign Language
- Second language learning in early childhood
- How deaf babies babble
- The difference, if any, between vocabulary babbling and manual babbling
- The similarity of young deaf children and hearing children gestures
- The relationship between early exposure to sign language and competency in language development
- The effect of learning sign language on early vocal development
- Deaf children's over generalize use of signs
- Deaf mothers' use of motherese
Activity 2.2 – Videotape, Segment 1

“Acquisition of ASL” by Dr. Brenda Schick

Reading #4: “The Development of ASL…”, notes to accompany videotaped lecture.

Purpose

You are going to view the videotape of Dr. Brenda Schick discussing the acquisition of ASL as a first language. Dr. Schick will discuss aspect of acquiring vs. learning a language using linguistic terminology presented in EDI 111. Make sure to review that terminology from EDI 111 if needed.

What to Look For

Reading #5 contains notes to accompany the lecture. You can use this as an advanced organizer and as a way to take your own notes.

Look for the answers to these questions as you watch the tape:

- If the things Dr. Schick says are true for Deaf children who are acquiring ASL as a first language, what kinds of things can you expect/anticipate for those children whose parents do NOT know ASL?
- Is learning English as a first language a possibility for deaf and hard of hearing children (English as a first language, naturally from their parents and in their environment)?
- Is learning a signed system a possibility for this child? Does anyone else in his/her environment know that system?
- When does a child begin to learn a language in a “natural” way? How old were YOU when you started to learn English?
- As an interpreter is "sign" your second language? If so, how would you rate your acquisition/learning of your second language? Who have your models been?
- One of the most striking comments Dr. Schick made, was: "Deaf children do not have language-learning problems, they have difficulty getting ACCESS to the language; the problem is OURS, not THEIRS." What is meant by this comment?
Activity 2.3 – Reading #5

“The silent garden: Raising your deaf child” by Paul Ogden, pgs. 3-8 and 195-212

Purpose

As you read these articles, you will become aware that there is no single or simple answer or approach when working with students who are deaf. These readings are designed to help you to identify some of the quantifiable features in students who are deaf or hard of hearing. It is those features, similarities and differences that need to be considered when interpreting for a student who is deaf or hard of hearing. These articles were written for parents, they are not academic in nature but help identify the defining features of the deaf and hard of hearing population.

What to Look For

In the “Introductions” section (pages 3-8):

- The ten distinguishing features that are used to define the spectrum of possibilities within the deaf population.

You will use these features in Assignment 1 to develop a profile of the student for whom you interpret.

In the article “The School Environment” (pages 195-212), you will start to consider what makes a good classroom for a deaf child:

- Guidelines for parents to follow when visiting their child’s classroom.
- Environmental factors related to the set-up of a classroom for deaf and hard-of-hearing children.
- Teacher expectations of the children in a class.
- The role of language use in the classroom.
- Ways in which parents can monitor and evaluate the effectiveness of a teacher who is working with deaf and hard-of-hearing children.
• Ways in which parents can evaluate the effectiveness of a mainstream classroom that includes deaf or hard-of-hearing children.

**Insights**

The 10 questions posed in pages 3-8 in the Ogden article provide you with a way to analyze a Deaf or Hard of Hearing person's background and to understand the challenges they may have faced in acquiring language. This has direct implications for you as an interpreter because:

• The more you know about a child's language background, the more you can adapt to his/her language style when you interpret.

• Once you see each deaf child as an individual, you then see the need for constant "analysis" on the part of the interpreter. How can the interpreter match the message to the individual student's linguistic level. What signs are the most appropriate? How much English should be included/not included?

You will have the opportunity to directly apply this reading in Assignment 1 when you develop a profile of the student for whom you interpret.

The second article by Ogden, "The School Environment", also provides very useful, practical information. You may not have control over the classroom environment in which you interpret, but have you really stopped to think about how many challenges a classroom environment may pose to your deaf students? This article should give you some good insight into what makes a classroom conducive or very difficult for your deaf student. And, there may be things that you can do to improve the setting and help your student get the most out of his/her classroom experience. You will explore this issue of "classroom accessibility" in much more detail in EDI 223.
Lesson 2 Summary

Conclusion

You saw that Deaf students who have Deaf parents acquire ASL in a natural setting, just like the hearing children you considered previously. You saw that ASL has all the linguistic features of a language.

You have studied the critical factors of heredity, environment and culture and their impact on language development. Deaf and Hard of Hearing people do not constitute a homogenous group, but rather, they form a diverse group composed of smaller subgroups. You looked at the distinguishing features that differentiate those subgroups and began thinking about how those distinguishing features impact students within the educational setting. You began to think about adapting to a deaf students language style when you interpret.

Key Points

The points to remember are:

- Deaf students who have deaf parents acquire ASL in a natural setting, just like you acquired English, Spanish or ASL, for those of you with deaf parents.

- Deaf students are as different as any group!! Do not try to categorize them or make generalizations based on one or two individuals.

- The more you know about a child’s language background, the more you can adapt to his/her language style when you interpret.

- Once you see each deaf child as an individual, you then see the need for constant “analysis” on the part of the interpreter. How can the interpreter match the message to the individual student's linguistic level. What signs are the most appropriate? How much English should be included/not included?

- As interpreters you are (for the most part) learning ASL as a second language. How does your learning ASL impact your ability to match the students linguistic level?
What Next?

In Lesson 3 your focus shifts from the student you interpret for to the classroom, from the issues impacting the development of language to the types of language used in the educational setting. It is critical to understand the environment of the classroom and the types of discourse that occur in that environment. Most of you acquired English as a first language and thus take for granted the intricacies of your first language. However, when working professionally with language it is essential to understand it at a deeper level. Lesson 3 will look at two levels of discourse commonly used in classroom.
Lesson 3 – BICS and CALP

Introduction

Lesson 3 shifts the focus from the student to the classroom. In this lesson you will take a closer look at types of discourse used in the classroom and the communication skills students must develop throughout their school years to compete, develop and have access to their own education. Cummins wrote that language acquisition consists of two types: Basic Interpersonal Communication Skills (BICS), and Cognitive Academic Language Proficiency (CALP). Neither of these types or levels of language are explicitly taught, rather, they are acquired. Few individuals outside of the linguistic academic community are even aware of the types or levels of language that exist. Yet, the ability to use both types is essential to a student's success in the classroom. It is critical for interpreters to understand the types of language/discourse used in classroom and the challenges these types might pose for students with weak first languages as well as for the process of interpreting.

Overall Plan

You will have readings and explore web ites that discuss the two types of language used in the classroom: Basic Interpersonal Communication Skills (BICS), and Cognitive Academic Language Proficiency (CALP). This lesson is generally exciting for educational interpreters because it begins to challenge assumptions made regarding English. The readings may also shed light on questions or challenges posed by types of discourse educational interpreters confronted when working. Remember the diversity of the deaf and hard of hearing population and think about the 90% of deaf students with limited access to language models, especially when reading the articles (because the articles are written with hearing students in mind). Understanding the complexities of language help educational interpreters to understand the challenges students face and allow you to think about the interpreting process from another perspective.
# Lesson 3 Map

## Lesson 3 – Basic Interpersonal Comm. Skills/Cognitive Academic Language Proficiency

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<tbody>
<tr>
<td>![PPT]</td>
<td><strong>3.2</strong> PPT Introduction to BICS/CALP</td>
<td></td>
</tr>
<tr>
<td>![Book]</td>
<td><strong>3.3</strong> Reading #6: “Interdependence of first and second language proficiency…”</td>
<td></td>
</tr>
<tr>
<td>![Web]</td>
<td><strong>3.4</strong> Websites on BICS/CALP <a href="http://home.earthlink.net/~psychron/homepage.htm">http://home.earthlink.net/~psychron/homepage.htm</a></td>
<td></td>
</tr>
<tr>
<td>![Discussion]</td>
<td><strong>3.5</strong> WebCT Discussion Discussion on BICS/CALP</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Assignment 2</strong> – Paper on caregivers use of BICS/CALP</td>
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</table>
Insights

Before you begin to talk about L1 or L2 acquisition, you need a working definition for “proficiency”. What does it really mean when you say “I know a language”? Defining language proficiency is a difficult undertaking. There are many opinions about it, though no one doubts that it is an elusive characteristic. Cummins (1984, p. 131) said that the issues which surround language proficiency seem to be equally unclear at both a theoretical and at a research level. It is easier, although probably not very accurate, to make a subjective judgment about an individual’s competence; that means you can test how well a person uses a language. But we’ve already talked about the difference between what you know and what you use.

So, how does one objectively determine all the skills that comprise the whole and determine the ability of an individual in each skill? Many linguists and educators make a distinction between what you know about your language and how you use what you know. Over the years, Cummins (1991, p. 71) had developed a distinction and now labels them as “conversational” vs. “academic-language” proficiency.

He defines “conversational-language proficiency”, also referred to as Basic Interpersonal Communication Skills (BICS), as communication which is supported by contextual cues. The meaning, which is being communicated, is supported by contextual cues. The language one uses has a lot of information in the words, of course, but a lot of information is also in the context. Here’s a simple example:

“What’s a clock?”

“That thing on the wall.”

You get a pretty clear picture of what is communicated to you because you depend on the context; you share a context and therefore, you can communicate quite clearly.

His definition of “academic-language proficiency”, also called Cognitive Academic Language Proficiency (CALP), is that the meaning comes from linguistic cues which are independent of the context. A simple example of this is:

“What’s a clock?”

“A machine that tells time.”

This leaves you kind of feeling like you need a bit more information, doesn’t it? You need more context, some kind of background, something to connect the sentence to. Many others
linguists refer to these two distinctions as “contextualized and decontextualized” use of language (Snow et al 1991, p. 90).

<table>
<thead>
<tr>
<th>BICS</th>
<th>CALP</th>
</tr>
</thead>
<tbody>
<tr>
<td>contextualized</td>
<td>decontextualized</td>
</tr>
<tr>
<td>conversational</td>
<td>academic</td>
</tr>
<tr>
<td>context-embedded</td>
<td>context-reduced</td>
</tr>
<tr>
<td>lots of info in the context</td>
<td>I have to fill in the info myself</td>
</tr>
</tbody>
</table>

Remember, the normal acquisition of a native language tends to be informal, natural, and somewhat spontaneous. You saw Dr. Schick’s videotape of deaf children learning ASL as their L1, and it appeared to be as normal, natural, and spontaneous as when most of you learned English as your L1. You need to keep in mind how most of the students you interpret for learned their L1...or have they learned it?

Cognitive Academic Language Proficiency (CALP) involves academically-oriented language, and is communicated in context-reduced situations, where the information necessary to understand and participate is abstract and often removed in time and space from the here-and-now.

This is language about school subjects and processes and is more difficult for students who are deaf because:

- there usually aren’t many visual cues
  - for example, when the teacher is talking about the “checks and balances” system of your federal government
  - for example, when a math teacher is explaining Algebra to a group of new freshmen he/she may have the equation on the board, but what, really does that Y mean?
  - for example, when a chemistry teacher is explaining atoms he/she may actually use visual aids (pictures, drawings) but the students must visualize an atom for themselves

- it is about topics or ideas that a learner does not encounter in daily life
  - for example, the economic situation in Korea and how their problems are effecting our stock market and economy

- the language is more sophisticated: longer and more complex sentences, vocabulary that is more abstract and formal, etc.
Insights (continued)

These kinds of topics can occur in numerous settings: class lectures, group discussion, reading an assignment in the library, writing a book report, etc.

Hearing children have had exposure to their L1 since birth and can add CALP to the BICS they already have. Many deaf children do not experience opportunities for acquisition of BICS language until entry into the school setting. At the same time, classroom personnel expect these children to have mastered BICS and to begin to function at a CALP level of English. Isn't that the way you functioned? You developed your BICS before you went to school. Then, while in school, you added CALP to what you already had.

Students who have a strong foundation in their L1 have the distinct advantage when acquiring/learning a second language. This foundation normally begins with L1 BICS and then progresses to L1 CALP. The stronger the proficiency in the first language (L1), the greater the possibility of transfer of this proficiency to the second language (L2). L1 BICS is required first, then you add L1 CALP, which also effects L2 BICS.

Sometimes, deaf children have an L1 BICS and an L2 BICS, meaning they can function in both sign language and English, but only when dealing with contextually embedded information! When they are forced to rely on the language only, and do not have visual or contextual cues, they get lost.

Sometimes, young deaf and hard of hearing learners, due to a lack of access, have not had the opportunity to develop a strong L1 BICS at the time of entry into school. This effects their ability to develop L1 CALP.

We might expect some of the following consequences:

- Little success in use of (any) language to interact with peers
- Experiences of academic failure
- Feelings of inadequacy and low self-esteem
- Frustration at not being able to communicate social or other expressions
- Social isolation
- What else?

The questions for you as an interpreter are:

- What could be some solutions to the above?
- When you recognize a problem area of decontextualized material (CALP) can contextual material (BICS) supports be added??
Activity 3.1 – Textbook from EDI 111


**Purpose**

The purpose of this reading is to introduce you to some of the changes and challenges that take place as a child enters school.

**What to Look For**

Look for the following points: (pages 215 to bottom of 222):

- Even for a hearing child, “each child's communication experiences coming into school have been unique, and these experiences have shaped the child’s language and his communication skills”. (p. 217).

- What do you expect a child to learn about language as they go to school?
  - Increase vocabulary
  - Improved grammar
  - More sophisticated language use
  - Metalinguistic awareness
  - How to read and write
  - Personal/cognitive growth

In pages 252-257 “The Classroom and Language: New Demands”:

- The difference between language at home and language at school.

- The language forms in the classroom:
  - The language of academic subjects or curriculum
  - The language of behavior management
  - The language by which personal identity is expressed

- The difficulty children who enter school with language skills that fall below grade level have in adjusting to these new forms of language.

- The impact of cultural diversity in the classroom and the difficulty this presents for students and teachers.
Activity 3.2 – PowerPoint Presentation

PowerPoint Presentation on BICS/CALP

Purpose

The purpose of this presentation is to give you a visual introduction to BICS/CALP.

What to Look For

- Clarification of the meaning of BICS (Basic Interpersonal Communication) and CALP (Cognitive Academic Language Proficiency)
- The relationship of BICS and CALP
- The necessity of BICS and CALP in accessing education
- The impact of a second language on the development of BICS and CALP

Instructional Insights

In many ways, the deaf students in a mainstream setting are asked to do the impossible.

We expect them to function in L2 (English) when often they have not yet developed a strong L1 (ASL)

Or, we expect them to function in their L1 (English) when they have not developed a CALP; they function in their BICS

Either way, it’s difficult, and can be extremely frustrating for the student (and everyone else involved) but often we don’t understand the reason for the frustration. Hopefully, after this lesson, you have a better understanding of the reason for “gaps” in a student’s language abilities.
Activity 3.3 – Reading #6

“Interdependence of first-and second-language proficiency in bilingual children” by Jim Cummins

Purpose

Read this article and think about the different kinds of proficiency or skill you have in your language. Proficiency is not just one thing. If it were, you wouldn’t have so many tests in school. Think about how many kinds of tests children (deaf and hearing) experience as schools try to analyze their language skills: reading tests, intelligence tests, performance tests, etc. (Whether a test really tests what schools say it does is a question you could address in another course!!) Let’s just think about proficiency as having two areas: Cummins is a great supporter of this. You’ll see the underlining in the article...kind of lets you know what is important!! And keep those two simple sentences. In the Author’s Insights as examples in mind.

What to Look For

- Cummins’ exact definitions of BICS and CALP
- You need a strong foundation in your L1 before you can begin to develop a strong L2
- Do the students you work with have a strong foundation in their L1? Can they develop a strong L2?

Insights

Now, Cummins also said that context-embedded communication (BICS) calls individuals to have a shared reality so both know what is being talking about. There isn’t a great need to explain things in the message because you’re sharing information that is familiar to you. In other words, those involved in the communication share a reality and the linguistic message does not need to be elaborated precisely and explicitly. There is minimal risk of misunderstanding. Those involved in the conversation can “negotiate” meaning by, for one thing, providing backchannel feedback that the message is not clear.
Context-reduced communication (CALP), on the other hand, derives from the fact that this shared reality cannot be assumed, and thus linguistic messages must be elaborated precisely and explicitly so that the risk of misinterpretation is minimized (Cummins, 1983, p. 120). The individuals in this conversation rely primarily on linguistic cues to explain the meaning of the conversation. You were not there when I spilled the coffee on that chair in the corner of the room; maybe you’ve never even been in my living room so the information has to be explained to you. You do not have a shared reality.

Another example...if you’re talking to someone who’s native language is not English, and you’re standing in front of the bank and you can see the church down the street, and he’s asking you directions to the church, You have a lot of “context” to use, to explain your directions to him. You can point to the church. You can point to the traffic lights between here and there. You can even walk part of the way with him. He has a lot of context to use to understand your directions. However, if you wanted to have a conversation with this same person about a problem you were having with your insurance agent, what context can you use? He would be almost entirely dependent upon your words, and you would have to “elaborate the linguistic message precisely and explicitly so that the risk of misinterpretation is minimized”.

The goal in education is to decrease context-embedded communication (BICS) and increase context-reduced communication (CALP). Why? Because CALP requires a higher level of language processing and that higher level is what you want to achieve. You want to be able to add new information to your knowledge “bank”. You do not want to always have to function with someone who shares a reality with us. You want new and different information. You want to be able to read, and to understand what the author understands.

So, now, think about the students you see in your schools both hearing and deaf. If the teacher is talking about the change of seasons and he/she has a globe, pictures of the different seasons, a calendar, etc. the student has a lot of “context” to hang the linguistic representations on. But, if the teacher is talking about the results of World War II, and the economic impact the end of the War had on a specific country...well, a map just doesn’t help, does it?
Activity 3.4 – Web Activity

Visit Ron Anderson's Home Page at:
http://home.earthlink.net/~psychron/homepage.htm

Purpose

Ron Anderson’s home page provides additional information regarding the
Assessment of BICS and CALP. As languages change continually, one cannot ever have "completed" the acquisition process. There are always new terms and concepts, and changes in grammar that occur. So, as you read the article on the website, remember that this is a model of assessment that measures language use at a particular point in time. As a result, the focus is on comparing individuals to some benchmark, and that the variety of benchmarks selected are intended to include important benchmarks in a given language. Consider the ways in which these benchmarks are evident in the student with whom you work and the ways the author states these benchmarks can be appropriately assessed. This article will also attempt to give the reader an overview of BICS and CALP acquisition rates in a typical child who is learning two languages, where one is introduced later than the first language.

What to Look For

Go to this site and click on Assessment of BICS/CALP- A Developmental Perspective.

- Learning rates of typical children over time
- Types of benchmarks used to measure language competence
- Qualitative differences in CALP learning over a lifetime
- The impact of 2nd language acquisition during childhood
- BICS acquisition as a development process
- BICS of adults versus children
- Relationship of BICS to CALP
- Tests that can be used to measure BICS and CALP.
Activity 3.5 – WebCT Discussion

Discuss BICS/CALP

Purpose

This discussion will give you a chance to share your thoughts on BICS/CALP with your classmates and to learn from each other.

What To Look For

Answer one of these thought questions, or propose your own topic/question:

- How do the 3 language forms used in the classroom (discussed in the textbook reading) relate to what you understand about BICS/CALP?
- How does the profile you developed for your student in Assignment 1 help you understand where they are in their BICS/CALP?
- What are your experiences in learning ASL as a second language in relationship to BICS/CALP?
Lesson 3 Summary

Conclusion

In this lesson, you studied the different types of discourse that are commonly used in the classroom. You looked at the difference between context-embedded and context-reduced communication (BICS/CALP). You reflected on these two types of discourse and their impact on language development of infants and toddlers. You should have a clear understanding of the difference between the two, and be able to come up with a number of situations for each. You will be applying this information to the classroom later in this course so make sure you are comfortable with it. Be sure to use your WebCT discussion groups and your facilitator to clarify any areas that are cloudy or questionable and to share your understanding with each other.

Key Points

The points to remember:

- Context-embedded vs. context-reduced communication
- BICS vs. CALP
- The importance of a strong L1, if one is to learn an L2
- The interdependence of L1 and L2
- We expect them to function in L2 (English) when often they have not yet developed a strong L1 (ASL)
- Or, you expect them to function in their L1 (English) when they have not developed a CALP; they function in their BICS

Either way, it’s difficult, and can be extremely frustrating for the student (and everyone else involved) but often you don’t understand the reason for the frustration. Hopefully, after this lesson, you have a better understanding of the reason for “gaps” in a student’s language abilities.

What Next?

In Lesson 4 you will have an opportunity to formulate your thinking and synthesize your learning. You will watch a videotape of an elementary classroom and analyze the discourse for the use of BICS and CALP.
Lesson 4 Classroom Discourse Analysis

Introduction

Now that you have this foundation in language acquisition/learning, bilingualism, BICS/CALP, etc....what does it all mean? All this information is helpful only if you can apply it to your work as an educational interpreter. Remember, the goal of integrating this knowledge component with your interpreting skills is to become more effective as an educational interpreter.

Overall Plan

In this lesson you will be watching a videotape of a classroom setting. The setting is a traditional elementary classroom. There are no interpreters hidden in the closet. After viewing this videotape you will be asked to discuss the classroom discourse that appears on the tape and the relationship of BICS/CALP that is demonstrated. You will be asked to discuss the discourse factors that may have an impact upon a deaf student’s educational experience and upon the work of an educational interpreter. This will provide evidence for the fourth EICP Core Competency.
Lesson Map

Lesson 4 - Classroom Discourse Analysis

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>4.1</td>
<td>Lesson Introduction – PPT</td>
</tr>
</tbody>
</table>
| 4.2 | Watch videotape: Segment 3  
Public School in Action  1st Grade |
|   | **Assignment 3** - Analyze Classroom Discourse for relationship of BICS and CALP |
|   | **Assignment 4** - Utilizing the profile you developed for Assignment 1 and your classroom analysis from Assignment 3, discuss the implications of classroom discourse on the educational experience of the deaf or hard of hearing student for whom you interpret. |

Insights

You have discussed and read about language proficiency, bilingualism, BICS and CALP. The focus of EDI 112 now shifts to how this knowledge based information impacts the work you do everyday as an educational interpreter. The job descriptions of educational interpreters vary across the country. The roles and responsibilities of educational interpreters are evolving as more research is conducted regarding language acquisition of deaf and hard of hearing children, and intricacies of discourse commonly used in classrooms. (You’ll spend time on the R&R in future EICP courses!) As you work and continue your study be mindful of the interlocking that is occurring in the EICP strands of study.
Activity 4.1 – PowerPoint Presentation

Watch PowerPoint introduction to the lesson

**Purpose**

This PPT provides an introduction to Lesson 4, and an overview of the lesson content. Insights are presented for your consideration. The fourth assignment is discussed.

**What to Look For**

- The use of BICS and CALP in elementary school classrooms
- The relationship and inter-dependency of BICS and CALP
Activity 4.2 – Videotape, Segment 3

Videotape, Segment 3:
The Public School in Action, First Grade

Purpose

The third segment of videotape provided is the basis of your fourth assignment. You may need to watch this videotape segment several times; it is an action packed videotape of an elementary school classroom. Multiple viewings will allow you to evaluate and analyze the types of discourse used in the classroom. The purpose of activity is to analyze the discourse used in this traditional elementary school classroom. Watch the videotape for examples of BICS and CALP, as they occur naturally in the classroom, and the relationship of BICS and CALP.

What to Look For

Look for these points as you watch the videotape:

- Examples of BICS/CALP as they occur naturally in an elementary school classroom
- The relationship of BICS/CALP in the elementary school classroom
- Areas of discourse in the typical elementary school classroom that could prove problematic for a student who is deaf or hard of hearing
- Areas of discourse in the typical elementary school classroom that could require an educational interpreter to use expansions or scaffolding
Lesson 4 Summary

Conclusion

This lesson presented you an opportunity to synthesize and then apply the knowledge presented in EDI 112: Language and Learning. The analysis of the classroom discourse allowed you to identify the two common types of discourse (BICS and CALP) used in the classroom. It further allowed you to study the relationship of those two types of discourse. This understanding provided a foundation that fostered insight and the ability to recognize and predict challenging areas of discourse. These challenging areas of discourse exist both for students who are deaf or hard of hearing and for educational interpreters. The reasons are, of course, different – nonetheless, the challenges are there. The ability to recognize and predict problematic areas is an essential tool for Educational Interpreters.

Key Points

Things to remember:

- BICS and CALP discourse occurs as a natural part of the classroom process
- The use of BICS and CALP has impact on how interpreters use language during interpreting
- Interpreters may find it necessary to use expansions/contextualization strategies to make the meaning of BICS and CALP more explicit
- An understanding of scaffolding is essential for creating meaningful interpreted discourse when BICS and CALP is being used.
What Next?

The next lesson will shift the focus from BICS and CALP to another theory that relates to effective language performance in children. You will be introduced to the concept of Theory of Mind. This concept was first recognized and introduced by David Premack and Guy Woodroff (1978). The development of Theory of Mind (ToM) is dependent on strong linguistic abilities. The implications for the students who are deaf or hard of hearing and for the process of interpreting are not fully understood at this time, but appear to be far reaching. You will briefly apply this theory to a discussion of some thought questions, and in future courses, you will consider the application of this theory to tutoring techniques and the interpreting process.
Lesson 5 - Theory of Mind

Introduction

This lesson will introduce you to the concept of Theory of Mind. The term Theory of Mind was coined by David Premack and Guy Woodruff (1978) in a paper investigating a chimpanzee’s ability to predict the behavior of another by means of a mental state ability. In the twenty years since the paper, the most extensive research has been in the area of developmental psychology, where scientist investigate what human children know about the minds of others.

A “Theory of Mind” is a specific cognitive ability that allows one to understand other intentions. That is, to interpret their minds in terms of theoretical concepts of intentional states such as beliefs and is dependent upon one's linguistic abilities. In short, the term Theory of Mind refers to an individual's awareness that people, including themselves, have minds, which consist of an interconnected set of mental states such as beliefs, desires, and feelings, and that these mental states influence events in the physical world, as well as people’s behavior. Possessing a theory of mind is critical for social, affective and communicative relationships in that it allows for explanation, prediction, and manipulation of behavior and ultimately promotes social interaction and communication with others.

Educationally, it is important to understand the concept of theory of mind and its relationship to language. In everyday social and academic lives, individuals routinely understand the behavior of others by attributing mental states to them. Possessing theory of mind is critical to the ability to read and comprehend actions of characters. Since its development is dependent on linguistic abilities there is some evidence that the development of a Theory of Mind might be weak in some students who are deaf or hard of hearing. This could have far reaching consequence for students in the education process and on the work of an educational interpreter.

In this lesson, you will watch a videotape by Dr. Brenda Schick. Dr. Schick will introduce you to the concept of Theory of Mind. This lesson is intended as an introduction. You will not be applying this knowledge immediately. It is important to begin considering the many complexities of language and the impacts of not having a strong first language.
### Overall Plan

This lesson will introduce you to the concept of Theory of Mind and further discuss the implications of a weak L1 on the educational process and its implications for educational interpreters.

### Lesson 5 Map

#### Lesson 5 - Theory of the Mind

<table>
<thead>
<tr>
<th></th>
<th>5.1</th>
<th>Introduction to ToM – PPT presentation Web Article: <a href="http://clerccenter.gallaudet.edu/products/perspectives/sep-oct99/lundy.html">http://clerccenter.gallaudet.edu/products/perspectives/sep-oct99/lundy.html</a></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.2</td>
<td>Watch Segment 2 of videotape: Theory of Mind by Brenda Schick Reading #7: Outline to accompany “Theory of Mind” lecture</td>
</tr>
<tr>
<td></td>
<td>5.3</td>
<td>Reading #8: “Mother-child participation in conversation…”</td>
</tr>
<tr>
<td></td>
<td>5.4</td>
<td>WebCT Discussion: Post thoughts/observations about Theory of Mind Assignment 5 – Post the additions to your resource packet for EDI 111 and 112. Complete on-line course evaluation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Last day of course.</td>
</tr>
</tbody>
</table>
Activity 5.1 – Introduction to ToM

Introduction to ToM – PPT presentation

Web Article:
http://clerccenter.gallaudet.edu/products/perspectives/sep-oct99/lundy.html

Purpose

This PPT and web article provides an introduction to Lesson 5, and an overview of the lesson content. Insights are presented for your consideration as you read and view the material. This lesson presents an additional theory for you to consider regarding language acquisition in children, both deaf and not deaf.

What to Look For

Look for the following points in the presentation and reading:

- The meaning of Theory of Mind
- The components necessary for the development of Theory of Mind
- The time frame for the normal development of Theory of Mind
- The implications both academic and social for not having a fully developed Theory of Mind
Activity 5.2 – Videotape, Segment 2

Videotape, Segment 2: Theory of Mind Dr. B. Schick

Reading #7: Outline by Dr. Schick that supports the videotape lecture re: Theory of Mind

Purpose

The videotape is intended as an introduction to the concept of Theory of Mind. It is little bit of a tease of good things to come. It is to start you thinking of the complexities that are imbedded in your discourse. This concept may be helpful to some of you in understanding difficulties students face.

The outline is intended to support the videotape. The outline follows the key points being discussed on the videotape and will reduce your need for note-taking while you are watching the video.

What to Look For

Look for the following key points in the presentation:

- The meaning of Theory of Mind
- The components necessary for the development of Theory of Mind
- The time frame for the normal development of Theory of Mind
- The impact of Theory of Mind on academic and social abilities
- The presence of Theory of Mind's in children who are deaf
Activity 5.3 - Reading #8

“Mother child participation in conversation about the past: relationship to preschoolers' Theory of Mind”

Purpose

You need to look at what researchers believe is the foundation of Theory of Mind. This will help you begin to think about your students, their background, language exposure and development and to think about where they are in regards to the development of Theory of Mind. Then you can think about how you as the interpreter can assist the development of Theory of Mind.

What to Look for

- The concept, Theory of Mind
- The age at which Theory of Mind is developed in hearing children of hearing parents
- To think about the language exposure that the 90% of deaf children receive during their formative years
- The expectations in the classroom for students to apply Theory of Mind
- Theory of Mind's impact on your work as an educational interpreter
Activity 5.4 – WebCT Discussion

Post Observations about the Theory of Mind to your group Discussion Forum

Purpose

You will not have the opportunity to synthesize your learning about Theory of Mind in this lesson or in this course. That will not come until later coursework, beginning with EDI 211 Curriculum Methods and Materials, EDI 212 Tutoring Techniques, and EDI 223 Communication Assessment. However, it is important to explore your understanding regarding Theory of Mind with your peers and colleagues in an effort to consider how it applies to your experiences as an interpreter.

Approaching the Task

Reflect on your reading and on the comments made by Dr. Schick regarding theory of mind and post your thoughts related to at least one (1) of the following thought questions.

- What are some of the factors that impact on the delay in development of Theory of Mind in children who are deaf?
- How do we predict what others will do in a given situation?
- Why is a theory of mind important?
- What factors ‘cause’ the development of a Theory of Mind?
- What elements signal cognitive maturation in a child?
- What grammatical structures facilitate a Theory of Mind?
- How does the understanding of emotions relate to Theory of Mind?
- What can be done in a classroom to promote a Theory of Mind?
- How does awareness of a Theory of Mind impact on your work as an interpreter?

Your posting should conform to the following guidelines.
- The posting should not be any longer than 150 words
• The posting should identify which question or questions is being addressed
• The posting should reflect self-awareness and reflection of the readings associated with Lesson 5 and with the theories being discussed in this course. So, if you draw on ideas or thoughts that have been stated by one of the authors from course materials, the work should be appropriately cited.

What Next?

This lesson concludes the EDI 112 Language and Learning course. You can take a deep breath, as you move into the section that provides you with an overall course summary and begin considering your evaluation of this course. EDI 111 Child and Language Development and EDI 112 Language and Learning have provided you with a foundation related to the process of language acquisition and use by children. This foundation is important to you as an educational interpreter in preparing you to make more informed decisions regarding how you use language as part of the interpreting process and as part of your own classroom communication.
Lesson 5 Summary

Conclusion

One of the paradoxes about learning is the fact that the more you know, the more you know there is more to know. This paradox certainly holds true for the educational interpreting profession. The profession has evolved from the helper model to the bi-bi model of interpreting and continues to grow and change. At one time, it was felt that educational interpreters just needed to sign exactly what was said. The concept of integrating interpreting, knowledge and language skills is becoming the norm in the field. It is important for educational interpreters to stay current not only with their sign skills but with the knowledge base skills that complement the skill component. The concept of Theory of Mind is still a relatively new concept. There is no definitive research on its impact on deaf children. However, research is currently being conducted at the University of Colorado regarding Theory of Mind and Language Skills. If you are interested you can go to Dr. Brenda Schick’s home page http://stripe.colorado.edu/~schick and click on Theory of Mind.

Key Points

The things to remember are:

- Theory of Mind develops in most hearing children of hearing parents by age four.
- Theory of Mind development is dependent on accessing mental states of adults around the child as he/she acquires language.
- Research shows that deaf children's Theory of Mind development is significantly behind that of their hearing peers.
- Theory of Mind is a critical aspect to cognition and helps children interpersonally as well as academically.


Course Summary

Conclusion

EDI 112: Language and Learning examined the issues that impact the language acquisition and development of children who are deaf or hard of hearing. The distinguishing features that delineated and shape the educational needs of the deaf and hard of hearing population were studied. Various approaches to the Education of the Deaf were also studied. The educational issues that might arise due to weak first languages were examined. Those educational needs were different for the 10% of deaf children who have deaf parents; they generally do not exhibit delays in language development. With a firm foundation in language development and resulting implications, the focus changed to the classroom. The types of classroom discourse were studied. The impact on students as well as interpreters was discussed.

Key Points

The key points to remember are:

- Children exposed to a language rich environment, be it ASL or English, will ultimately become fluent users of the language.
- Deaf children grow up bilingual with sign language as their first language and the spoken language of their country as a second language (usually written).
- Deaf students are as different as any group!! Do not try to categorize them or make generalizations based on one or two individuals.
- The more you know about a child’s language background, the more you can adapt to his/her language style when you interpret.
- As interpreters you are (for the most part) learning ASL as a second language. How does your learning ASL impact your ability to match the students linguistic level?
- BICS vs. CALP is an important concept for understanding the challenges posed by classroom discourse.
- A strong L1 is critical for learning an L2.
• Research shows that deaf children's Theory of Mind development is significantly behind that of their hearing peers.

• Theory of Mind is a critical aspect to cognition and helps children interpersonally as well as academically.

**What Next?**

A foundation in Child and Language Development and Language and Learning will provide you the necessary background to continue this area of study. You will next be attending the Summer Institute where you will have an opportunity to practice your language skills and learn more about ASL as a language.

Then in the fall you will continue the study of language with EDI 121: Language and Signed Systems. You will also take EDI 114 Professional Educational Interpreting, which will introduce you to the laws defining the use of interpreters in educational settings, qualifications of educational interpreters, roles and responsibilities, and professional standards and practices of educational interpreters.
<table>
<thead>
<tr>
<th>Glossary</th>
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<tbody>
<tr>
<td><strong>Term</strong></td>
<td><strong>Definition</strong></td>
</tr>
<tr>
<td>A-Language</td>
<td>A person’s native or first language.</td>
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<tr>
<td>ASL</td>
<td>American Sign Language</td>
</tr>
<tr>
<td>Accessibility</td>
<td>A term that in the context of the ADA (Americans with Disabilities Act) guarantees equal opportunity for individuals with disabilities in public accommodations, employment, transportation, State and local government services, and telecommunications. Various guidelines define how to make these services “accessible” to persons with disabilities.</td>
</tr>
<tr>
<td>Affect</td>
<td>Refers to the emotions of the speaker.</td>
</tr>
<tr>
<td>Allomorph</td>
<td>Any one of the possible phonetic forms of a morpheme. For example, the phonetic (s) of cats (k ts), (z) of pigs (p gz), and ( z) horses (hôr s z) are allomorphs of the English plural morpheme.</td>
</tr>
<tr>
<td>B-Language</td>
<td>A person’s second language</td>
</tr>
<tr>
<td>Babbling</td>
<td>Repeated sounds that include consonant and vowels done by infants (mamama, bababa).</td>
</tr>
<tr>
<td>Behaviorism</td>
<td>Theories that focus on the observable and measurable aspects of language development. Most behaviorist theories focus on Stimulus – Response situations.</td>
</tr>
<tr>
<td>BICS</td>
<td>Basic Interpersonal Communication Skills - refers to the &quot;social&quot; language that is acquired first and enables children to function in a day to day environment.</td>
</tr>
<tr>
<td>Bilingual-Bicultural</td>
<td>Programs which recognize that children may come from a different culture and speak a different language in the home than in the school.</td>
</tr>
<tr>
<td>Bound morpheme</td>
<td>A sound that must be attached to a free morpheme to be meaningful, like “un” or “ing” or “ed”. These can be <em>inflectional</em> (added to the front of words) or prefixes or <em>derivational</em> (added to the end of words) or suffixes.</td>
</tr>
<tr>
<td>CALP</td>
<td>Cognitive Academic Language Proficiency - refers to the language necessary to communicate and function in an academic environment.</td>
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<tr>
<td>Chomsky</td>
<td>A nativist who supported the linguistic approach to language development. Chomsky suggested that humans have an inner mechanism (LAD) which enables them to learn language.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>Cognition</td>
<td>The dictionary definition of cognition is “the mental process or faculty of knowing, including aspects such as awareness, perception, reasoning, language, memory and judgment.”</td>
</tr>
<tr>
<td>Common Underlying Proficiency (CUP)</td>
<td>A model developed by Jim Cummins that demonstrates how learning a second language (L2) is dependent upon a level of proficiency in your first language (L1). The CUP is the common area of proficiency in both languages so that no matter which language the person is using, the thoughts that accompany reading, writing, speaking and listening come from the same basic engine. (<a href="http://www.irc-ekits.org/PDFs/law-theory/Bics-Calp.PDF">http://www.irc-ekits.org/PDFs/law-theory/Bics-Calp.PDF</a>)</td>
</tr>
<tr>
<td>Communication</td>
<td>The act of communicating; transmission which includes the exchange of thoughts, messages, or information, as by speech, signals, writing, or behavior.</td>
</tr>
<tr>
<td>Critical Period</td>
<td>A reference made to the hypothesis that there is a biologically-based period for second language acquisition that prevents older learners from acquiring native speaking competence. For first language acquisition this critical period refers to a hypothesis that children exposed to a language in the early years will learn that language perfectly.</td>
</tr>
<tr>
<td>Discourse</td>
<td>Verbal exchange; conversation The following useful definition is taken from O'Sullivan, Tim, Hartley, John, et al. (1994). <em>Key Concepts in Communication and Cultural Studies</em>. London: Routledge: 93-94. Discourse (adjective = discursive). A term now quite widely used in a number of different disciplines and schools of thought, often with different purposes. Most uncontroversially, it is used in linguistics to refer to verbal utterances of greater magnitude than the sentence. Discourse analysis is concerned not only with complex utterances by one speaker, but more frequently with the turn-taking interaction between two or more, and with the linguistic rules and conventions that are taken to be in play and governing such discourses in their given context</td>
</tr>
<tr>
<td>Echoloalia</td>
<td>A form of babbling that occurs around 8-12 months in which an infant “parrots” or imitates sounds, syllables or words.</td>
</tr>
<tr>
<td>Expressive language</td>
<td>Speaking, writing or signing</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>False belief</td>
<td>A stage in ToM that occurs between ages 4-5 when children are able to attribute a false belief to someone else.</td>
</tr>
<tr>
<td>Free morpheme</td>
<td>A sound that can stand alone and be meaningful.</td>
</tr>
<tr>
<td>Illocutionary stage</td>
<td>From 8-12 months when an infant begins to use sounds and gestures to communicate intentionally.</td>
</tr>
<tr>
<td>Intentional communications</td>
<td>The use of sounds or gestures for a purpose.</td>
</tr>
<tr>
<td>IPA</td>
<td>Information Processing Approach to language development which focuses on the thought processes required during language acquisition. This patterns what happens in the human brain after what happens in a computer.</td>
</tr>
<tr>
<td>L1</td>
<td>Primary language</td>
</tr>
<tr>
<td>L2</td>
<td>Secondary language</td>
</tr>
<tr>
<td>LAD</td>
<td>Language acquisition device. A theory proposed by Chomsky that the LAD is a physiological part of the brain that is a specialized language processor and enables children to acquire language.</td>
</tr>
<tr>
<td>Language</td>
<td>Language refers to &quot;a form of communication in which we learn to use complex rules to form and manipulate symbols (words or gestures) that are to generate an endless number of meaningful sentences&quot; (Plotnik, 1999).</td>
</tr>
<tr>
<td>Linguistics</td>
<td>The core of linguistics is defined by the investigation of syntax (sentence structure), semantics (meaning), morphology (word structure), phonology (sound structure) &amp; phonetics (speech sounds and their production).</td>
</tr>
<tr>
<td>Locutionary stage</td>
<td>When a child produces the first meaningful words.</td>
</tr>
<tr>
<td>Majority language</td>
<td>The language of the community. Since some articles discussing the acquisition of sign language as a second language are not strictly written for audiences in one country, the spoken language of the community is referred to as the &quot;majority language&quot;.</td>
</tr>
<tr>
<td>MLU</td>
<td>Mean length of utterance – a way to measure language development by averaging the morphemes produced in several utterances.</td>
</tr>
<tr>
<td>Metalinguistic awareness</td>
<td>Metalinguistic awareness is the process of thinking about and reflecting on the nature and functions of language</td>
</tr>
<tr>
<td>Modality</td>
<td>A particular sense, as in auditory or visual</td>
</tr>
<tr>
<td>Morpheme</td>
<td>The smallest unit of meaning in a language. Words can consist of one or more morpheme.</td>
</tr>
<tr>
<td>Nature/Nature</td>
<td>Two opposing theories for human development. Nature indicates that people are born with innate capabilities and tendencies. And nuture prescribes that learning is a</td>
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<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>Overextension</td>
<td>As it refers to a child’s language use, this means the use of some principle of language in cases where it does not apply. For example, the child understands that a plural is formed by adding “s”, so uses it all the time – mans instead of men. Or “ed” is added to all verbs to form the past tense.</td>
</tr>
<tr>
<td>Perlocutionary stage</td>
<td>Early infancy which starts with only reflexive cries and progresses to some purposeful communication.</td>
</tr>
<tr>
<td>Phoneme</td>
<td>The smallest distinctive elements of a language.</td>
</tr>
<tr>
<td>Phonology</td>
<td>Phonology deals with the function of sounds within a language.</td>
</tr>
<tr>
<td>Piaget</td>
<td>Piaget was a Swiss psychologist who developed a theory about child development. The theory is based on the idea that the developing child builds cognitive structures--in other words, mental &quot;maps,&quot; schemes, or networked concepts for understanding and responding to physical experiences within his or her environment. (Funderstanding)</td>
</tr>
<tr>
<td>Pragmatics</td>
<td>The system of rules that dictates the way language is used to accomplish social ends. The general study of how context affects the user’s interpretation of language.</td>
</tr>
<tr>
<td>Pragmatic skills</td>
<td>Turn taking, initiating communication</td>
</tr>
<tr>
<td>Prosodic</td>
<td>The patterns of stress and intonation in a language</td>
</tr>
<tr>
<td>Protodeclaritive gesture</td>
<td>Indicates a statement – point out objects or events.</td>
</tr>
<tr>
<td>Protomperative gesture</td>
<td>Gestures used to control or manipulate the behavior of others (ask for something).</td>
</tr>
<tr>
<td>Prototype</td>
<td>A model or standard used to understand a concept. Development of these prototypes help a child understand and use language.</td>
</tr>
<tr>
<td>Protoword</td>
<td>Invented word that may occur during the transition from pre-speech to speech</td>
</tr>
<tr>
<td>Receptive language</td>
<td>Understanding what is said, written or signed</td>
</tr>
<tr>
<td>Reflexive sounds</td>
<td>Unlearned or natural sounds made by a baby including cries, coos, burps, sneezes.</td>
</tr>
<tr>
<td>Skinner</td>
<td>A behavioral psychologist who researched conditioning in humans.</td>
</tr>
<tr>
<td>Semantics</td>
<td>The study of the meaning system of a language.</td>
</tr>
<tr>
<td>Semantic networks</td>
<td>Connections between words and concepts. For example, pain and pane are linked as are oak, spruce and birch. The “links” can be based on different relationships and concepts.</td>
</tr>
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<tr>
<td>Scaffold</td>
<td>A supportive linguistic/communicative context supplied by care givers to young children.</td>
</tr>
<tr>
<td>Syntax</td>
<td>The rules by which sentences are made.</td>
</tr>
<tr>
<td>Theory of Mind</td>
<td>A &quot;Theory of Mind&quot; is a specific cognitive ability that allows one to understand other intentions.</td>
</tr>
<tr>
<td>Underextension</td>
<td>Use of a word too narrowly. For example, the word &quot;cookie&quot; is used to refer to chocolate chip cookie, but not any other kind of cookie.</td>
</tr>
<tr>
<td>Vygotsky</td>
<td>A “social interactionist” who believed that language is a process that is developed as a result of interaction with the environment.</td>
</tr>
<tr>
<td>Zone of Proximal Development</td>
<td>Vygotsky (1978) maintained the child follows the adult's example and gradually develops the ability to do certain tasks without help or assistance. He called the difference between what a child can do with help and what he or she can do without guidance the &quot;zone of proximal development&quot; (ZPD).</td>
</tr>
</tbody>
</table>
EDI 112 Resources

This page contains links to various resources that may be helpful to you during the course.

These are provided just to get you started. One of the objectives of this course is to give you experience researching topics on the web on your own.

Please note that links and references on the web change all the time. These sites were all working at the time the course was published, but things can change daily on the web!

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<tr>
<th>Lesson 1 - Language Acquisition in Deaf Children</th>
<th>Activity 1.3 resources</th>
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</thead>
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<tr>
<td>&quot;First Language: Sign or Speech&quot;&quot;Sign Language as a First Language&quot;</td>
<td><a href="http://clerccenter.gallaudet.edu/Products/Sharing-Ideas/afirst/critspoken.html">http://clerccenter.gallaudet.edu/Products/Sharing-Ideas/afirst/critspoken.html</a></td>
</tr>
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<td></td>
<td><a href="http://www.cnts.ua.ac.be/IASCL/bulletinV20N2.pdf">http://www.cnts.ua.ac.be/IASCL/bulletinV20N2.pdf</a> (article on pages 4-6)</td>
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<tr>
<td>Articles at Gallaudet:</td>
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<td>&quot;First language, whose choice is it?&quot;</td>
<td><a href="http://clerccenter.gallaudet.edu/Products/Sharing-Ideas/afirst/intro.html">http://clerccenter.gallaudet.edu/Products/Sharing-Ideas/afirst/intro.html</a></td>
</tr>
<tr>
<td>Communicating with deaf and hard of hearing babies</td>
<td><a href="http://clerccenter2.gallaudet.edu/KidsWorldDeafNet/e-docs/visual-conversations/index.html">http://clerccenter2.gallaudet.edu/KidsWorldDeafNet/e-docs/visual-conversations/index.html</a></td>
</tr>
<tr>
<td>Tips for promoting communication in deaf children</td>
<td><a href="http://clerccenter.gallaudet.edu/SupportServices/series/4005.html">http://clerccenter.gallaudet.edu/SupportServices/series/4005.html</a></td>
</tr>
<tr>
<td>Language choices</td>
<td><a href="http://clerccenter.gallaudet.edu/SupportServices/series/4010.html">http://clerccenter.gallaudet.edu/SupportServices/series/4010.html</a></td>
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<tr>
<td>Other articles:</td>
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<tr>
<td>Slides from a presentation about language acquisition and the &quot;critical period&quot;</td>
<td><a href="http://www.bu.edu/linguistics/UG/course/lx700-s01/handouts/lx700-12-CPH.pdf">http://www.bu.edu/linguistics/UG/course/lx700-s01/handouts/lx700-12-CPH.pdf</a></td>
</tr>
<tr>
<td>Article on critical period</td>
<td><a href="http://www.facstaff.bucknell.edu/rbeard/acquisition.html">http://www.facstaff.bucknell.edu/rbeard/acquisition.html</a></td>
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</tbody>
</table>
## Lesson 2 - Acquisition of American Sign Language

<table>
<thead>
<tr>
<th>Brenda Schick's home page</th>
<th><a href="http://stripe.colorado.edu/~schick/">http://stripe.colorado.edu/~schick/</a></th>
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<tbody>
<tr>
<td>ASL as a language</td>
<td><a href="http://www.signmedia.com/info/asl.htm">http://www.signmedia.com/info/asl.htm</a></td>
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## Lesson 3 - BICS/CALP

<table>
<thead>
<tr>
<th><strong>Activity 3.4 resource</strong></th>
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<tbody>
<tr>
<td>Simple explanation of BICS/CALP</td>
</tr>
<tr>
<td>Table comparing BICS/CALP</td>
</tr>
<tr>
<td>Chart showing 4 quadrants</td>
</tr>
<tr>
<td>Article on BICS/CALP and curriculum</td>
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</table>

## Lesson 4 - Classroom Discourse Analysis

<table>
<thead>
<tr>
<th><strong>Discourse Analysis</strong></th>
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<tr>
<td>Basic article on &quot;discourse analysis&quot; with definitions</td>
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</table>
# Lesson 5 - Theory of Mind

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<tr>
<td>Simple explanation of main points of ToM</td>
<td><a href="http://host.uniroma3.it/progetti/kant/field/tom.htm">http://host.uniroma3.it/progetti/kant/field/tom.htm</a></td>
</tr>
</tbody>
</table>

## General Resources

| Links to a series of articles at Gallaudet | [http://clerccenter.gallaudet.edu/Products/Sharing-Ideas/index.html](http://clerccenter.gallaudet.edu/Products/Sharing-Ideas/index.html) |